K. Sena Makeig

ONE FINGER ON THE WORLD

Copyright © 2014 K. Sena Makeig

All rights reserved. No part of this book may be used or reproduced by any means, graphic, electronic, or mechanical, including photocopying, recording, taping or by any information storage retrieval without the written permission of the author except in the case of brief quotations embodied in critical articles and reviews.

One Finger on the World may be purchased on the author's website. http://www.kmakeig.com

ISBN: 9781-520374711 (paperback) ASIN: 1520374747 (Amazon paperback)

ISBN: 9781491736203 (ebook)

ANSI: BOINBUYVXR (Amazon ebook)

Library of Congress Number: 2014910606

For Miss Watt

Derby Junior High School

Contents

PART ONE – Virginia
CHAPTER 1 – Bad Moon Rising
CHAPTER 2 – Not Fade Away
CHAPTER 3 - Desperado
CHAPTER 4 – Cloud Nine
CHAPTER 5 – Losing My Religion
CHAPTER 6 – Run Right Back
CHAPTER 7 – With a Little Help from My Friends
CHAPTER 8 – What's Going On?
CHAPTER 9 – American Woman
CHAPTER 10 - (Why Must I Be a) Teenager in Love
CHAPTER 11 – I'm Looking Through You
CHAPTER 12 – It's My Life
CHAPTER 13 – We Gotta Get Out of This Place
PART TWO – California
CHAPTER 14 – Good Vibrations
CHAPTER 15 – Dancing in the Dark
CHAPTER 16 – Imagine
CHAPTER 17 – Don't Look Back
CHAPTER 18 – Over the Rainbow
CHAPTER 19 – I'll Stand By You
CHAPTER 20 - Money
CHAPTER 21 – Ghost in This House
ACKNOWLEDGMENTS

PART ONE

VIRGINIA

"I can't go back to yesterday because I was a different person then."

—Lewis Carroll, Alice in Wonderland

CHAPTER 1

"Bad Moon Rising"
(as performed by Creedence Clearwater Revival)



The steering wheel jerked roughly in his hands as the left front tire blew. Snarling a curse, Mark Malone pulled onto the rutted shoulder of the deserted country road and cut his engine.

"Crap," he muttered aloud as he got out to inspect the damage.

The shortcut he sometimes took to shave a few minutes off his trip to the University of Virginia's Computing Center (the "lab") was pockmarked with potholes that finally put an end to one of his tread-bare tires. He checked the time on his phone. At this rate, he was sure to be late for his part-time, afternoon job at the lab. He'd been lucky to score it last year. In a community outreach initiative, the university had awarded a single, coveted internship at its computing center

to a local high school student who showed "exceptional promise." Mark wasn't sure how exceptional his promise was, but he'd charmed his way through the interview and easily passed the programming test. His reward had been a cubicle situated among the most motivated coders and computer geeks at the university. Providentially, it provided him with direct access to some of the fastest, most sophisticated computing power in the Commonwealth. His boss surely would cut him some slack because he'd never been late before and he really needed this job.

He looked around forlornly, but what he saw wasn't promising. He hadn't passed another car since turning off onto this dirt road. His phone teased him with an unhelpful display of the time while offering up an infuriatingly intermittent service signal. As a result, his futile attempts to call his best friend, Danny, dropped before they connected. *So much for Plan B*, he sighed. He wasn't desperate enough to try his mother (*Plan Z*); the less he depended on her, the better. Consequently, he ended up sending a quick text to Danny, hoping it would get through when the signal briefly reappeared, but the annoying error message kept instructing him to try again. Kicking some loose dirt along the shoulder, he cursed between clenched teeth. *Damned Virginia backwoods*.

Mark rounded the front of the car and squatted down, shading his eyes with his hand. The car's weight was awkwardly resting on the rim of the left front wheel, while deflated rubber pleated around it like exhausted fabric. He had no spare; he couldn't afford one. *Crap. This is just too perfect*.

Mark swatted at a curious fly circling lazily around his head. Despite the deepening dusk, the air hung heavy and hot, typical of late-summer Virginia days sweating into early September. The only sounds were the low humming of insects and the scratching of an unseen squirrel scurrying through the forest floor litter. Crooked shadows stretched across the road like arthritic fingers reaching towards the tops of the trees. Soon it would be dark.

Mark found a jack buried in the trunk beneath his smelly hockey gear, still damp from a practice earlier that afternoon. He skated as a seasoned defenseman on the high school varsity team, a tough position that rewarded both his hard work and controlled aggression. Hockey was something that made him feel good, a positive focus in an otherwise disjointed life. Nevertheless, the satisfaction that accompanied a good workout was fading along with the sunlight. The jack dropped next to the wheel with a dull thud, raising a small dust cloud. Not only was he going to be late for work, but he would be filthy, as well.

In vain, he again checked his phone to see if his text to Danny had gone through. Actually, his first instinct had been to call his girlfriend, Emma, but he knew she couldn't give him a ride because she would still be at swim practice. Mark knelt down in the dirt, absently retrieving the jack handle. He couldn't keep his thoughts from drifting to images of the girl who'd become such a large part of his life.

Emma Gartner—one day, the haze of his own ego had obscured her, and the next, she'd become the center of his universe. He'd loved the very thought of her, even before a

full sentence had passed between them. Their relationship hadn't gone through a typical friendship phase; it had shot straight to hormonal insanity. The next thing he knew, conversation had to be wedged between breathless kisses.

Emma was tall for a girl, only a few inches shorter than Mark himself. She had the lithe body of a competitive swimmer, and could knock the stuffing out of a baseball, a skill that Mark found inexplicably beguiling. Most of the time, she wore her blonde hair in silky waves that framed a pair of clear blue eyes set in a flawless face—flawless except for the interesting little scar above her left eyebrow, made all the more intriguing because she wouldn't tell him how she got it. There was a warm softness to her body, and she had plenty of enticing curves exactly where they were meant to be. Emma would be the first to admit she wasn't a classic beauty—not like her older sister, Kara, anyway. Mark figured she was just being hard on herself, because it clearly wasn't only her beautiful mind that attracted him.

Being able to hang around Emma almost compensated for the double curse of being stuck in high school and living in Charlottesville. Even though two American presidents had found the pastoral nature of the town charming enough to make it their permanent homes, Mark felt its grip slowly tightening around his throat. He was disconsolate at being able to catch only an occasional glimpse of a larger world from this tiny, insignificant speck of Virginia, much like he was on a speeding train that wouldn't let him off. He knew there was a more exciting life out there, and he was missing it.

He also knew he should be more content with his circumstances. However reluctantly, Mark had to admit he possessed the inherent equipment to succeed in life, primarily the result of good genes rather than anything for which he could claim credit. He had a head full of unruly black hair that he wore just below his collar in a proud display of youthful defiance. Standing just under six feet, he was sure he had one more growth spurt in him that would produce the inch or so he needed to break that height barrier. In his mind, it was no coincidence that tall people held an unspoken advantage, even if undeserved. His orthodontist was responsible for his perfect smile, one people told him brightened his entire face and made him look receptive and certainly more optimistic than he usually felt.

Mark was strong and coordinated enough to excel on the battlefield of high school athletics, and his intelligent face, illuminated by luminescent green eyes, frequently drew admiring looks from complete strangers. With considerable bitterness, his mother complained frequently that he was just like his father—physical perfection marred by an unhealthy attraction to risk, treacherous affections, and an untrustworthy temper. Was that really how she saw him? After all, how evil could he have become in seventeen short years?

Mark sometimes mused about the classic attributes of physical strength and beauty—coveted in high school, valued by society at large, and timelessly saluted by playwrights and poets. These twin qualities could be disparaged easily enough by someone who already possessed them, Mark was the first to admit, and he tried his best simply to appreciate his good

fortune. But he knew it would be his intellect, not physical traits, that would eventually save him from the ordinary life he dreaded. To this end, he cultivated a love of both math and history—one feeding his need for order and logic, and the other profoundly messy and glorious—although he knew his true calling was neither math nor history, but computers. His outward appearance and inner jock were offset by some pretty serious nerd qualities.

He found peace in a virtual world where he could be completely anonymous, could easily distinguish between unambiguous computer game villains and heroes, and could become utterly lost in the immeasurable depths of cyberspace. To feed his digital compulsion, he joined a local users' group where he'd learned about the internship at UVA. Now, glaring at his disabled car, he'd better quickly find a way to get to work or he wouldn't have an internship left to worry about.

His damp T-shirt clung unpleasantly to his back as he knelt beside the wheel. Carefully positioning the jack in the frame, he pumped the handle. The car groaned in protest as its weight slowly shifted. He used the lug wrench to remove the first nut, but was met only with oxidized resistance. Repositioning the wrench for better leverage, he applied all of his weight in a second attempt. A rusty screech temporarily silenced the woods. He wiped his damp hands on his jeans to get a better grip and tried again. With a final, unconvincing growl of protest, the nut dropped into the dirt and nonchalantly rolled to a stop beside his knee. Mark sat back on his haunches and blew out his breath. *Damn, this is gonna take all friggin' night*.

As he worked on the remaining nuts, Mark tried to distract himself by thinking about a minor but bothersome programming glitch that had been plaguing him at the lab and for which he'd sought help from a fellow programmer, Leroy Geller, one of the graduate students assigned to supervise him. As Mark had dumped his backpack on his desk the previous afternoon, Leroy had greeted him with a cup of coffee.

"It's about time you showed up, Malone. What happened? Recess running a little late today?"

Mark accepted the coffee with a grin. "What's up, Leroy?"

Leroy was majoring in applied mathematics and electronic communications, and Mark thought him fairly bright even though he looked like a throwback to an earlier decade, or century. He was a rangy student with skin the color of polished walnut and a ubiquitous expression of fretfulness etched on his face. He wore oversized pants low on his hips, and every abrupt movement threatened to expose whatever lay beneath. Leroy often smelled of musty tobacco or weed and wore a ubiquitous look of hunger; his ceaseless scouting in the kitchen for leftovers was legendary. His head was a tangle of brown dreads that probably hadn't been visited by a comb since his undergraduate days. Nevertheless, Leroy was a hell of a programmer who understood the big picture, so he was able to guide Mark through the maze of specifications, design requirements, validation procedures, and testing to keep him on track.

The two of them were part of a UVA Computing Center team working on a contract the lab had won during the winter of Mark's sophomore year. The work was for MedStat Pharmaceuticals Inc., a small but prosperous drug firm out of Boston. The contract called for the completion of a Food and Drug Administration (FDA) application for some new drug called AKL-436. The task was not as straightforward as the team originally hoped, and for the last several months Mark had been deeply engrossed in modifying and testing an open source code to help organize and analyze the massive data sets generated from endless clinical trials, one aspect of the large, multifaceted program. UVA's relatively inexpensive proposal to use open sources rather than starting from scratch had been MedStat's salvation, the perfect answer to their rapidly dwindling budget. A November submittal date for the application to the FDA made the deadline to finish and test their work tight, but the project team had made good progress over the summer by employing a vast array of impoverished summer students and had been able to maintain the schedule.

"You still getting run-time errors?" Leroy asked as he took a seat on the adjacent desk and lit a cigarette, intentionally ignoring the fact that it was a nonsmoking building.

"Yeah." Mark sighed. "I haven't been able to isolate the problem yet."

"That sucks," Leroy intoned as he leaned closer. "Lemme see."

Although the glitch had temporarily sidetracked his progress, it was only a minor distraction from Mark's larger

assignment, which was to help develop a set of algorithms to analyze statistical differences in the human-trials data. The background material he'd read purported that this new Alzheimer's drug, whimsically nicknamed Superspeed by the otherwise dour research team, increased both the rapidity and frequency of neurotransmissions in the brain by bathing inactive areas of the synaptic landscape in a proprietary, drug-laced, serotonin-rich soup. Although the details of the drug's pharmacology were lost on Mark, he could imagine the potential of Superspeed if such claims were true—increased brainpower and superior concentration, all in a simple daily injection. This thing could be epic and worth billions.

"Get up for a sec." Leroy shouldered Mark out of his chair and took over his keyboard, but after only a few minutes, he was scratching his head in frustration. "You try the debugger that I put in the editing folder?"

"Yeah, totally useless." Mark shrugged apologetically as he absently sipped his coffee. "You know, like, maybe it's not my function at all. Maybe it's some new data server vulnerability, or some crap that was inserted into the source code before we modified it." All good programmers knew that open sources sometimes behaved erratically or might be corrupted (unintentionally or maliciously) while passing through countless hands on their journey across the Internet.

Leroy pursed his lips. "Well, if all else fails, get an earlier version before it turned to shit and do a line-by-line comparison." Leroy shoved away from the desk with a small, better-you-than-me smile. "Good luck with that, dude." He'd

retreated to his office, flicking ashes onto the floor as he went.

Yet here Mark was, stuck in the middle of nowhere when he should already be at his desk, wrestling with his code. Yesterday he'd spent an exhausting night at the lab, trying to pinpoint the programming problem, to no avail. After all, there were limits to what he could do as one of the more junior programmers with limited access to the majority of project data. He'd heard rumors that MedStat had dumped a staggering amount of unstructured information, including digital scans of hand-written notes, onto the lab's servers after the contract was awarded. Mark couldn't understand how research could be conducted so chaotically, but this programming experience would look great on his college applications, so he'd willingly put in long hours. Besides, he could use the extra money, especially now that he needed to replace this damn tire.

As Mark was about to loosen the final nut, something caused him to look up. Had he heard something? The trees stood limp and unmoving in the windless air. The sun hovered noncommittally at the horizon. Mark was just beginning to stand up when he felt an arm squeeze around his neck from behind, causing the sky and woods to shimmer. He could only make a gurgling sound before he passed out.



Mark slowly opened his eyes. He lay beneath a stiff, white sheet, his hands and feet tightly bound. A few minutes of ineffective struggling convinced him there was no chance he could break free. After a while he lay still, listening to the

creaking of the room around him as it transitioned from the heat of the day to the cooling night. His pulse throbbed in his ears. The emptiness of the room swallowed his calls for help. He wasn't cold, yet he shivered with uncertainty.

The only illumination came from a dim light shining somewhere behind him, casting eerie shadows across the textured ceiling and walls. Heavy shades were drawn over the windows. He couldn't distinguish much in the gloom and his restraints restricted his view of his surroundings, but from what little he could make out, he suspected he might be in someone's basement.

His wrists were bound above his head to the rungs of what felt to be an old brass headboard; the cold metal posts held fast when he shook them. Even this minor effort made his restraints cut further into his already tender wrists, so he soon gave up and lay motionless, waiting. Waiting for what, he couldn't begin to guess.

He had no idea how long he'd lain here, but it was long enough for his arms to tingle. Annoyance and impatience began to crowd out his initial fear. If the situation hadn't been so unsettling, it might have been almost laughable. Here he was, trussed up like some guy in a bad slasher flick. What's that formula again? Oh, yeah. The black dude always dies first, while the girl with the impressive rack, invariably in her underwear, runs screaming through the misty woods at night, chased by some deranged psychopath dripping with blood. Except this wasn't a movie—it was real, and it was pissing him off.

At the sound of someone finally entering the room, Mark struggled to see who it was, but his captor remained just out of sight.

"Listen," Mark began evenly, as if speaking to an obstreperous child, "if this is some kind of joke, it isn't funny." Yet somehow he already knew it was no joke.

"Sorry, but I don't have much of a sense of humor." The chuckle was mirthless, even while the sultriness of the voice unnerved him. He couldn't place it, though he knew he'd heard it somewhere before. He tugged at his bonds again.

"Don't waste your strength, sweetie," she whispered in his ear. "You might need it later."

"Who the hell are you?" Mark demanded. "Where am I? Why are you doing this to me?" His voice rose. "Cut me the fuck loose."

"Don't be so impatient, little man." She slowly entered his field of vision. He didn't recognize her right away, though something about her definitely was familiar.

His captor was coolly attractive with free-flowing blonde hair that broke gracefully over her shoulders. Her lovely face didn't display even a hint of softness. Tall and well proportioned, with graceful hands and long legs, she looked strong as shit—a real gym rat, Mark thought, probably in her late twenties. Even through the icy blue of her eyes, Mark could sense her amusement at his predicament.

"You remember me, don't you, Mark?" A delicate eyebrow arched.

He narrowed his eyes but couldn't quite read her expression. "No." *How does she know my name?*

"Sure you do. I'm Emma's sister."

Emma's sister? Mark thought back to a day last spring when Emma had hastily introduced him to her older sister as she was getting into that awesome silver Porsche in their parents' driveway. According to Emma, her sister had just returned to Charlottesville, having spent several years in Boston and New York after graduating from college.

"Kara?"

"See? I knew you'd remember."

Oh, man. This is sooo screwed up. Mark recalled Emma telling him that Kara no longer had much to do with their family. The ten-year age difference had been too large for the sisters to overcome. Emma often speculated that Kara still resented her suffocating upbringing, as if it had robbed her of the excitement she thought she deserved, and somehow Emma was to blame. If that's what this was about, he couldn't understand why Kara would involve him in their private rivalry. It didn't make sense. But now he had an appreciation of why Emma was so wary of her.

"Kara, what the hell are you doing? This is crazy. Cut me loose."

"Don't worry. Nobody's gonna hurt you." She leaned over the bed, a malevolent smile playing across her perfectly outlined lips. She brushed back a black curl from his forehead, red nails grazing his damp face. "Emma's right—you're certainly a cute one." She wrinkled her nose, briefly resembling the high school cheerleader she'd once been.

Mark struggled to free himself with a fresh sense of urgency. "Kara, please. Let me go." Fear again began to bubble up like a threatening eruption. "What the hell are you doing?"

"Calm down, sweetie. You'll hurt yourself."

Discouraged, Mark lay back and tried to take the measure of the woman standing next to the bed. She wore skinny black jeans and a V-neck shirt that was too small, revealing plenty of cleavage in an overt display of sexual leverage. Nails and lips were painted the same shade of crimson as her shirt. Her features revealed an aggressive intelligence and the hardness of some past damage. She was about Emma's height and build, and from the back they might easily have been mistaken for each other. But no, he concluded, she wasn't like Emma at all.

Unable to guess her intentions, he tried a more conciliatory approach. "Listen, I promise I won't tell anyone about this; it'll just stay between you and me. Cut me loose and we can talk about whatever's going on with you."

"Hmm . . ." She lightly moved her fingers up his neck and along his jawline, making him flinch. "The impatience of youth." Her menacing fingertip briefly explored the softness

of his mouth, causing him to turn his head away. After a few minutes of futile struggle, he quieted again, wrists and ankles throbbing.

He let his head fall back onto the pillow in resignation. *Okay, I get it. You're in charge.* Beads of sweat ran down his temples, and his muscles ached from the uncomfortable angle of his arms.

"What the hell do you want from me?" His voice sounded strange, even to him.

"That's better," Kara cooed.

Frustrated by her evasiveness, he tried to reason with her. "Please, Kara, let me go. If you're looking for sex, I'll do whatever you want. You don't have to tie me up. Afterward, you can make up some story to tell Emma, and I'll back you up."

"This isn't about sex, sweetie."

Then why the hell am I naked and tied up?

Kara sat down on the edge of the bed, looking stern. "I'm not going to tell Emma a thing about this little encounter, and neither will you."

"You want me to stop seeing Emma? Is that what this is about?"

The sincerity of his question provoked a laugh. "You're precious—you know that? This has nothing to do with Emma. It's all about you, Marky."

"What then? I have no idea why the fuck you're doing this to me." Mark began to tremble with impotent anger. "What do you want?"

Kara shifted her position on the mattress which pulled against Mark's restraints, eliciting a groan.

"That's exactly the right question, little man."

"Huh?"

"You heard me. That's the question you need to ask, because there is something you can do for me."

Oh. shit. "What?"

"I did a little background checking on you, Mr. Malone. Turns out that you're pretty accomplished for such a young guy—good grades and high SATs, varsity hockey, prestigious internship, pretty girlfriend, definite scholarship material. So let me ask you—what about you might be valuable to someone like me, other than that face and this nice six-pack you have going on here?" Her hand rested warmly on his stomach. She seemed disappointed by his silence. "It's the lab, sweetie."

"The computing center?"

"Yes, the computing center," she echoed with a sarcasm that mocked his incredulity.

For the first time, Mark noticed the man standing in the shadows by the door, his thick arms folded across an expansive chest, resembling a cheap movie cliché. His

concern ratcheted up a few more notches and he decided to cooperate.

"Okay, I'm listening."

"That's better." Kara patted his stomach approvingly. "I understand you're working on a project for MedStat Pharmaceuticals."

He briefly wondered how she'd learned this, but knew better than to ask. "And?"

"I want you to steal something from them."

"Yeah, right." It took him a minute to realize she was serious. "Are you crazy? I'm just some low-level programmer, an intern with absolutely no authority. I don't have access to proprietary information. I've never even talked to anyone from MedStat. Every day, I sit in my little cubicle and pound out a zillion lines of boring code. So, if you're looking for company secrets, you've got the wrong guy." He gave his restraints another halfhearted tug for emphasis.

Kara smiled. "That's where you're wrong, Marky. You know more than you think you do. You already have access to the information I want, and I'm confident you'll get it for me. I think you just need a little . . . incentive."

Mark braced himself for the pummeling he thought he was about to receive from the man in the shadows. Instead, Kara straddled him, a thin syringe in her hand.

"Hold still and this won't hurt." There was the sudden pressure of a needle piercing his skin. The feeling of liquid ice speeding up the length of his arm to his shoulder took his breath away; his skin shimmered like the scales of a snake. Mark's eyes glazed over as the drug quickly went to work.

Kara sat back with satisfaction. "Just relax and don't fight it, hon. I know—it's a nasty business. I admit it's a little disorienting at first. Think of it like you just joined the Marines; first we have to tear you down in order to build you into our good little soldier."

The Marines, *shit*. Mark fought down the bile in his throat as he gradually descend into a chilling chemical abyss.

"I'm not cruel, you know," he heard her say through a wave of nausea. "That injection eventually should make you feel pretty good; just give it a few minutes." She lightly brushed his cheek in an insincere gesture of comfort. "There you go now. It's already getting better, isn't it? Feel like cooperating yet, my little soldier?"

Mark struggled to remain conscious, barely able to keep his watery eyes open. The disorienting assault enveloped him in a dense, incapacitating haze. It was a full minute before he could think again. The air exploding from his lungs made him realize that he'd been holding his breath. "Ahhh . . ."

"I'll take that as a yes."

Coolness spreading throughout his system and distracted him from everything else. The room pulsed in and out of focus, not like he was drunk, but as if he had abandoned his body and was hovering somewhere nearby. She'd freed his

legs—he was sure of it—but they were too heavy to move. His arms had lost all feeling. With his heart pounding wildly, he felt his neurons spark to life like billions of flaring match heads. He sensed Kara pressing against him because he could feel the heat radiating off her body, but he couldn't move away.

"Kara, don't do this," he pleaded hoarsely, because he knew he should, because this couldn't possibly be happening.

As he drifted in and out of consciousness, Kara's hands were on him, electrifying his skin. He gagged on her flesh when he tried to speak. His body responded to her without any instructions from him, and he couldn't stop himself from pursuing her through a fog of drug-induced desire. The boundaries of his skin became indistinct, and he seemed to become part of everything around him. His universe was distorted, amplified, flying in all directions.

It was an hour before she was finally finished with him, leaving him moist and spent on the bed. Deeply humiliated, he forced himself to imagine he was somewhere else to keep from throwing up.

As he lay listening to his own heartbeat, he felt the drug pulsing through his bloodstream, energizing his brain. The disorientation that had overwhelmed him only minutes before had left as abruptly as a bright lamp switched on in a dark room. Rational, organized thought came flooding back, and the startling clarity nearly blinded him. Instantaneously, he was able to assess both the damage she'd inflicted and the threat she represented. He took little solace in the fact that she didn't seem ready to kill him, at least not tonight.

"You bitch."

"I've been called worse," she laughed. "I must say, you did an admirable job for what I presume was your maiden voyage, if I'm to believe Emma." She lowered her voice an octave. "Now I'm gonna own you like a dog, my little soldier."

When she finally cut his wrist restraints, Mark threw up on the bed.

Kara rolled her eyes and abruptly stood up. "Let yourself out," she ordered over her shoulder as she left the room.

Mark's annoyingly focused brain had already jumped into hyper-drive, trying to make sense of recent events: trying to figure out what information she might want that he could access at the lab, thinking about his next hockey practice, outlining the upcoming experiment in chemistry class, puzzling about his programming glitch, wondering how he could keep Emma from finding out—he couldn't turn it off. His head almost exploded with the effort. He rose shakily and began to dress. The motionless figure by the door, gun glinting in the weak light of the room, made no move to stop him as he stumbled to the door, rested his hand on the cold knob, and willed himself to turn it. Mark lurched out into the unfamiliar darkness, no longer the unsullied teenager he'd been only a few hours earlier.



The warm night air pressed heavily against his skin as Mark was violently sick in the dirt. He slowly straightened up and looked around, but had no idea where he was. The woods around him were menacing with the ordinary sounds of the night whispering threats. Breaking into a jog, he felt safer with each uneven step. He finally stopped to catch his breath, hands on his knees like a spent runner, and wiped tears off his cheeks with the back of his fist. When he was sure he could control his voice, he took out his phone. Only fierce concentration enabled his trembling fingers to touch the correct numbers.

"Danny," he whispered when he heard a voice at the other end.

"What's up, man? Ah've been tryin' t'reach ya all night."

"Can you pick me up?"

"Dude, it's the middle of the night." There was a pause. "What's wrong? Where are you?"

"Hold on." His phone's GPS showed his location. "I'll text you a map. Can you pick me up?" Mark heard some rustling at the other end of the phone.

"Um, sure, Ah guess. What happened t'yer car?"

"It's a long story. Leave now, okay?"

"Dude, you all right? Ya sound kinda weird."

"Just come now." Mark looked around. "There's a deserted gas station down the road a few hundred feet. I'll be waiting there."

"Okay, man. Ah'll be there as soon as Ah can."

Mark let a long, slow breath out through his teeth. The taste of the night was still in his mouth, and he spat it onto the ground. His head was pounding. What the hell just happened? This wasn't at all how he'd pictured losing his virginity.

The ground seemed to be rolling under his feet as he trotted over to the concrete apron where gas pumps had once been anchored. He sat down on the curb, absently raking his fingers through his hair. Should he call the police? She couldn't just get away with this, could she? On the other hand, a police investigation would take forever, involve his mother, certainly make him the subject of ridicule and, worst of all, Emma was sure to find out about Kara. *Shit*. Right now, all he wanted was a hot shower.

He was lost in thought when the sound of a car engine made him look up. Headlights threw a beam of light across the empty station building, briefly illuminating him as he rose stiffly.

Danny was truly one of the good guys, Mark thought as he approached the car. Mark could rely on him, and the same held true for most members of Danny's family. With true southern hospitality, the Wallaces treated Mark as if he were some treasured family relic. They were a large, boisterous clan who could trace their Virginia roots back to well before

Danny's progenitors proudly served in the Army of Northern Virginia. Danny's mother possessed a pair of nonjudgmental arms that she often wrapped around Mark in a display of genuine affection and acceptance, something that would have felt good right about now.

"What's goin' on?" Danny asked as he got out of his car. Dressed in shorts and a rumpled T-shirt, bed head apparent, Mark's best friend looked around the darkened station as if the answer might be hiding somewhere in the shadows. Danny Wallace was a lanky, somewhat uncoordinated young man, possessing a burgeoning network of stringy muscles holding together an angular frame. His pleasant face boasted an unusually large mouth, flanked by a fairly impressive pair of ears that Mark assured him he would eventually grow into. Presently, however, concern filled his sleep-creased face.

"What're ya doin' out here in the middle o' nowhere?" His sweet southern drawl softened his apparent annoyance.

"Let's just get the hell out of here." Mark avoided eye contact.

The strain in his voice seemed to make Danny uneasy. "Ya wanna swing by yer car first?"

"No." He wanted to go home.

By the time Danny angled into a parking space in front of Mark's apartment building, it was well past midnight. Mark stole a furtive glance at his darkened apartment window, hoping his mother wouldn't be up. "Thanks."

"Whatever," Danny replied with a shrug. "See ya in the mornin'."

Mark quickly made his way up the walk to the building entrance, stumbling slightly as he went. He heard Danny accelerate into the street while sliding his key into the lock to open the lobby door. He remained pressing his forehead against its cool, hard surface for some time. Eventually, he managed to climb the stairs to his apartment. The sound of his mother moving inside made his stomach clench. He didn't have a chance to turn the knob before the door flew open. There she stood, wrapped in a wrinkled cotton robe and frowning disapprovingly, as if she'd just been asked to audition for the part of the star's aging mother instead of the leading role.

Laura Malone was a masterpiece of unrealized dreams. Mark had seen pictures of her and knew that she'd been an ebony-haired beauty many years ago—before the divorce, before the betrayal, before the relentless worry about money. Of course, none of it had been her fault.

"Where have you been?" she demanded. "It's the middle of the night."

He turned away without answering.

"Mark?" Seemingly uncertain what to do next, she stood in the hallway, barefoot and remote as some cardboard cutout with an attitude.

Mark and his mother had never been close, but the last few years had been miserable for them both. No longer a child but not quite an adult, Mark was suspended in an

uncomfortable adolescence, powerless to fix the jagged wound that had cut through his family. He and his mother had fled New York City and his strung-out father, leaving too many dollars and not enough good sense, only to land in the middle of rural Virginia. That was six years ago, and their relationship only seemed to be getting worse. In the ensuing years, her resentment toward the father eventually targeted the son. Mark had trained himself not to expect too much, merely striving to endure each passing day without sustaining too many additional battle scars.

"I got a flat. Danny drove me home. I need to go to bed." He ignored the questioning look on her face and retreated to the relative safety of his room.

"We'll talk about this in the morning," warned his mother as he pulled his door closed.

No, we won't. She was the one person with whom he would never share what had just happened to him. She hadn't earned any intimacy. She didn't deserve to know him. She was a goddamned fraud posing as his mother.

With trembling hands, he stripped off his clothes and threw his underwear into the trash. The warm shower should have calmed him, but his neurons continued to fire wildly. He watched the water swirling down the drain at his feet.

Leaning his head against the unyielding shower wall, he tried to understand what had happened to him.

Water surged over his hypersensitive skin while Mark shivered. His body continued its instinctive response to the night's assault. Even with exhaustion overtaking the rest of

him, his electrical network stubbornly remained energized while his brain eagerly consumed the drug as fuel. Was he hallucinating or could he really see the workings of the complex machinery of his body through the transparent surface of his skin? Mark gazed down at his hands, half expecting sparks to fly from his fingertips. AKL-436 mixed with his blood, surged through his veins, and gained its insidious foothold. Despite his resistance, his genome feverishly embraced Superspeed, and it terrified him that he had already begun to crave more.

CHAPTER 2

"Not Fade Away"
(as performed by The Walter Trout Power Trio)



Lin Pace absently snuffed out a half-smoked cigarette as he glared at his monitor. He tried to tune out his surroundings, especially the cell phone vibrating relentlessly on his desk. Reaching over, he turned it off without bothering to see who was calling. The computer monitors bathed the room in a surreal blue glow that competed with the rays of sunlight trying to slip in around the edges of the window shades. His stomach rumbled as he stretched the stiffness from his joints. He should see what there was for breakfast; he'd lost track of when he'd last eaten.

His trip to the kitchen was through a labyrinth of work paraphernalia: superannuated computer hardware; small hand tools; old monitors; and an assortment of cables, plugs, and peripherals. As he navigated the clutter, Lin again resolved to hire a service to clean things up. His mother would be appalled if she saw he was still living like a college student.

She was as well-ordered as a military parade, something Lin hadn't inherited, yet it was one of many things about his mother Lin found more quaint than annoying. Though she'd been in this country for over forty years, she still prepared elaborate Chinese meals nightly, conversed more in Chinese than English, and giggled self-consciously behind her hand in a habit from a distant Taiwanese childhood. She had assimilated in most other ways, though, and at the wheel of her lumbering Mercedes, Lin thought she resembled some petite, yet fierce dowager empress who could barely see over the dash.

She lived comfortably with Lin's father in the same Wellesley, Massachusetts, house where Lin and his sister, Mei, had spent their childhood. He was forever on the verge of returning home to visit, but a lack of motivation and an arduous work schedule repeatedly thwarted the planned trip. Until he could return, their video chats would have to suffice. As if on cue, Lin heard the synthetic ring of his computer and sprinted back to his office to answer the incoming Zoom call.

"What's that on your face?" his mother asked once they had settled into their conversation.

Lin's hand went up to finger the goatee he'd been growing for the last several months, briefly wondering why his mother acted as if she'd never seen it before. "This? Don't you think it's distinguished?" he teased.

"That thing makes you look like a goat. I want to see your handsome face when you come to see me. And when might I expect you?" Even his mother's mild reproach couldn't disguise a hint of amusement in her tone.

Trying his best to sound conciliatory, Lin replied, "My schedule's been crazy lately, Mom. I'll try to make it back sometime before Christmas." He scowled at his father's derisive snort.

Undeterred, his mother continued. "My friend Hui's daughter, Jiao, just finished her PhD and moved back into the family home until she finds a suitable job. You remember Jiao, don't you? She's such a beautiful girl, and so smart."

For years Lin and Jiao had attended Chinese school together on Saturday mornings, and he knew his mother had always hoped they would someday marry. "Sure, how is she?" Lin asked vaguely, his attention already wandering back to his work.

"Still unmarried, just like her younger sister—what was her name? I forget. It must be heartbreaking for Hui."

"Mom, you already have two terrific grandsons, so please don't try to make me feel guilty for not being married and having kids. Not everyone's as lucky as Mei and Howard"

Andrew Pace materialized in the frame on Lin's monitor. Despite his advancing years, his father's attractive face still maintained the same determined expression he'd adopted while surviving twelve years of Catholic school in South Boston, a harrowing tour in Vietnam, and the rigors of Berkeley's Haas School of Business. But now the expression wore the familiar look of silent disapproval.

"Lin, you know I love you and only want what's best for you," continued his mother, "but you won't find a wife sitting home alone playing computers."

"Yeah, Mom, I love you too, but I really should get going. I have a lot of work to do." Lin saw his father roll his eyes.

"At least invite yourself over to Mei's so she can make you a home-cooked meal," she implored, reluctant to sign off.

Lin sighed. "Mom, I know how to feed myself."

"Microwave frozen dinners are not real food, *bǎo bèi*.¹ Your big sister will take care of you. She's a good cook. Besides, her children should see their uncle more. Promise me you'll call her."

Lin glanced at the clock. "I promise. Don't worry about me. I'll call you next week. Love you. Bye." The screen froze on the image of his mother blowing him a kiss as he broke the connection.

Without intending to, his mother could make him feel guilty about his life—college dropout, no spouse, no kids, and no legitimate job. The job issue was a definite bone of contention with his father, as well. At the age of thirty-one, Lin had never worked for anyone but himself. He was a fearless entrepreneur who thrived on the freshness of an initial idea, and would wholeheartedly throw himself into the first few years of each of his start-ups, only to tire of the

¹ "Treasured object," term of endearment.

drudgery of actually running a business. Worrying about payrolls and taxes was a waste of his time—time he could spend producing something useful. At least that was his rationalization for cocooning himself in a solitary life in San Jose, hidden in the depths of his overlarge house and behind the comfortable anonymity of his online identity, Shogun. Ten years had passed since Lin had taken himself off the grid. He didn't even have a bank account, preferring to keep large amounts of cash hidden around the house instead, just in case.

Lin refused to categorize himself as a "hacker," although what he did to support his lifestyle indisputably was hacking. But it wasn't malicious, at least to his way of thinking. He wasn't some contemptible black hat or malicious troll; he did it solely for the money. So he guessed that made him a garden-variety thief. He'd been operating well ahead of the law for some years now and only occasionally worried about being exposed. Besides, a healthy dose of paranoia was what kept hackers out of jail. His life of crime had started when a few of his high school buddies persuaded him to help them make fake IDs. As the operation grew more sophisticated, the gang recklessly began stealing credit card and bank account information. At the time, Lin didn't view it as an actual criminal enterprise, only some innocent fun. He hadn't really done it for the money back then either, but simply to prove he could. These days, Lin was undoubtedly in it for the money, as he attacked large, wealthy, and objectionable enterprises, while rationalizing his actions with political or social-justice arguments. Some selfreflection probably would have made him feel ashamed, but he never gave it much thought anymore. Besides, obscene

corporate profits or insurance company payouts could easily cover the losses, or so went his excuses.

Besides sometimes feeling like an outlaw, there were admittedly other downsides to his current lifestyle. He hadn't spoken to anyone but his parents and the barista at the local coffee shop for a few days now. He sometimes grew restless for no apparent reason, as if his years of teenage angst and soul-searching had ended prematurely. Yet if things went according to plan, his life of crime would soon be over.

Lin lit a cigarette and turned back to his computer, quickly reopening the work his parents had interrupted. Materializing on his monitors was a project he'd doggedly been working on for the past year, one that would finally free him from his life of crime. The idea came to him after learning of the cyberattacks that had played such a prominent role in the last national election. Lin went to work developing an application to more easily identify what are known as "deepfakes." The ability of miscreants to generate fake videos using artificial intelligence and sophisticated pattern recognition techniques was becoming more commonplace, often being used to discredit or embarrass people of influence or to manipulate current events. Although most of the original deepfakes involved frustrated sociopaths substituting actress heads on porn star bodies involved in some pretty graphic activities, the current trajectory of the industry was much more sinister. It was getting to the point where the video documentation of an event could not be trusted. Unscrupulous computer programmers were increasingly able to manipulate public perception by providing fake recordings of people doing and saying things

that never really took place. The methods they employed produced such sophisticated results that the layman usually couldn't tell truth from simulation.

Lin was able to produce a series of algorithms to expose the synthetic videos by using micro-expressions and visual tics and tendencies that are difficult to replicate in a deepfake. His application could compare the fake to the authentic image, pixel by pixel, something that until now was best performed by humans. But the human technique was time consuming, expensive, and sometimes unreliable, and with the exponential projected growth of this industry, there just weren't enough qualified humans to do the job. An application was needed to make the identification of a deepfake easier, faster, and less expensive.

Lin recognized a legitimate market seeking a good solution. After a year of concerted effort, he'd come up with one. It wasn't as if his aspirations were on a par with curing cancer or perfecting cold fusion, but the need for his application was clear, if somewhat transient, and he knew someone would be willing to pay big money for it. And the best part was that it would be legal.

He'd designed his application to identify a deepfake in several stages, depending on the level of sophistication of the simulation. The first stage was able to unmask the three most common deepfake techniques—lip-sync, face swap, and puppet-master. These were the easiest to uncover because they produced subtle inconsistencies that his algorithm was readily able to identify. He used a soft biometric model to determine the differences.

Unlike most models, Lin's application expanded the evaluation beyond the face, to recognize fake whole body movements. His application increased its success rate by interfering with the process initiated by an autoencoder. The autodecoder is used to reduce an image to a lower dimensional latent space after which the image is then reconstructed from the latent representation. By employing a sophisticated discriminator, Lin had produced a recognition success rate of around ninety-eight percent, much better than most of the models found at many research universities working on the problem.

Although his application would probably be obsolete in a few years, Lin knew it was much better than anything currently available, and he could offer it for less money than his competitors.

He had to admit it was some of his best work. The only problem was his most likely potential clients would include some of the major spy agencies, both domestic and international, and he wouldn't be all that comfortable collaborating with spooks.

It had taken hundreds of hours of effort to prove the concept and set up the architecture for his application. He was excited to be in the final stages of the its development, knowing it would soon be ready for commercialization. Commercialization, he knew, was a tricky concept. Most applications of a similar nature required not only the purchase of software, but hired developers to instruct the client how to use it, then hooking them into a lucrative, long-term contract for maintenance, technical support, and

periodic updates. Lin's application was designed to be so user friendly that he could sell it as a complete package and pretty much wash his hands of it, with the caveat of providing technical support on an as-needed basis. For that, he'd set up an independent company to hire, train, and manage the necessary programmers and product managers. He planned to sell his company to one of the big software firms so it wouldn't require his long-term involvement.

His best estimate put beta testing about two months away, but he was already pulling together a dog-and-pony show for potential buyers. Once the community recognized his program's value, Lin was confident he could retire a rich man before his next birthday. He could probably afford to buy his own island with the proceeds. Hell, he could even buy a wife and family if it made his mother happy.

A cloud of cigarette smoke hovered around Lin's head as he ruminated over the idea of a wife. His longest relationship with any woman had lasted eight crazy, intense months during his junior year in college. Ah, the follies of youth—his extended exhale suggested a slightly embarrassing wistfulness, even after all these years.

At six feet, Lin was one of the tallest men in his family—certainly the tallest on his mother's side, where he towered over the heads of his tiny Chinese relatives like a beneficent, yet slightly intimidating giant. Like them, he had thick, black hair, often worn pulled back into a ponytail to keep it out of his way. His skin was golden, unlike the ruddy complexion of his father's boisterous Irish relatives, but he had them to thank for his straight European nose and well-

defined facial bones. And yet Lin's most striking feature was a pair of penetrating black eyes, certainly Asian enough to look exotic to a working-class Boston girl.

He'd first encountered a local beauty named Clara behind the register at the MIT bookstore. Vivacious and voluptuous, Clara was the diametric opposite of the demure Asian girls he was used to dating. His future earning potential and his winsome face were enough to capture her attention, and he needed no coxing to fall hopelessly in love. Clara had been amused that such a stunning man was still a virgin when she noisily deflowered him one drunken night in the apartment Lin shared with two fellow students. Months of torrid sex followed as Lin made up for all those years he'd spent staring at computer screens.

He found everything about Clara irresistible, a needed diversion from the relentless demands of a heavy class load. Of course it couldn't last; he could have predicted that from the onset. As the initial infatuation began to wane, the tug of school drew him back to the predictability of his safe cyber world. To his relief, the computer never demanded to know what he was feeling, never was discovered in the middle of the night getting high in his bathroom, never flirted shamelessly with his roommates, and never drove him crazy pretending to be pregnant every time they had an argument and he threatened to leave. Clara had used him for his body and wanted him for his potential but didn't have a clue who he actually was. He knew it was over even before her things appeared one night in a few neatly stacked boxes in the corner of his apartment. Lin appreciated the fact that she'd dumped him without fanfare. His mother had been

disappointed by the breakup, fearing her son would be relegated to a life of loneliness. His father applauded it, claiming "that girl" was an unnecessary distraction and an unmitigated gold digger, as if she were some 1930s platinumhaired harlot out to ruin his family.

The breakup had been followed by a string of sexual encounters with as many men as women in an extreme manifestation of youthful experimentation. A fluid sexual identity didn't bother Lin in the least. He admitted that the idea of being with men was tantalizing, and the sex was usually pretty good, sometimes even great. He found he understood men better than he did women. In his experience, they played fewer games, or at least the ones they played were familiar to him. It was difficult enough to find fulfillment in life without mindless restrictions on whom one could and couldn't fuck, Lin reasoned. Besides, he really didn't mind being called bisexual if some idiotic label made it easier for the world to deal with him on his own terms.

There were aspects of the LGBTQ culture that Lin disliked—trolling bars for casual sex, gay or trans people who took drugs to disguise their despair or self-hatred, those who preyed upon youth with serious gender confusion issues, or the transvestites who were only in it for the beautiful clothes and makeup. Far be it for him to stereotype anyone, but he steered clear of those who naturally fell into these categories because, at least in his experience, they were nothing but trouble. He wanted someone who was comfortable with his or her own sexuality, not full of self-doubt and drama, and he would have jumped at the chance to be with anyone, man or woman, who didn't disappoint him.

But after all this time, Lin was fairly certain he'd given up on his search. Casual hookups would have to suffice for the time being. Relationships were just too much work and usually ended badly. Computers were far less complicated and immeasurably more predictable and safe.

The unexpected sound of his doorbell jolted Lin out of his reverie. Venturing into the foyer, he peered through the sidelight to behold his sister on his front porch, waiting with perfect posture and an air of impatience. Like miniature tornadoes, her two boys circled around her.

Lin's first thought was that someone had died. Why else would she show up unannounced in the middle of the day? He yanked open the door and braced himself for the bad news. Her boys, ages six and eight, shouted greetings before they jumped off the porch to begin chasing each other around his front lawn.

Their uncle stood in the doorway, squinting against the bright sun like a surfacing mole. "Mei."

"I tried to call," she offered as a halfhearted apology, "but you didn't answer your phone." She turned briefly toward her offspring. "You two stay in the yard," she instructed. "I'm going to talk with Uncle Lin for a few minutes."

Brushing past him, Mei strode into his kitchen like a soldier determined to capture an enemy hill. As she surveyed the room, a look of mild disgust clouded her face. "Really, Lin. How do you live like this?"

Lin shrugged unapologetically. He knew his life would never be as perfect as his sister's.

Mei and her economist husband, Howard Krupa, lived in nearby Hayward in a neat, fashionably decorated house with a weedless lawn and two SUV hybrids that always looked as if they'd just come from the carwash. His sister possessed a well-designed, sincere face and a no-nonsense manner. In a more acceptable progression than the one Lin had followed, she'd graduated from law school and landed a lucrative job at a prestigious firm in Walnut Creek. Howard's earning power had allowed his impatient wife to quit this first job after a few years of disillusionment and join the Alameda County public defender's office, where she put her fancy degree to use ensuring that poor, undocumented, disenfranchised, and bottom-feeders of society received fair trials. She thrived on it. However, today she stood in Lin's kitchen wearing sharply creased khaki shorts, an expensive flowered blouse, and a worried expression.

"You don't have work today?" Lin asked, foolishly thinking he might be able to cut things short so he could get back to work.

Mei searched for a clean spot and then gingerly placed her designer bag on the counter. "I had to take a vacation day. The boys are off from school for some ridiculous teacher thing." Hands on hips, she surveyed the kitchen in a gesture that reminded Lin of their mother. "When was the last time you wiped down these countertops—or even saw them, for that matter?"

A brief flash of resentment shot through Lin, but he quickly squelched it. Instead, he turned to the task of making a fresh pot of coffee. "You didn't come here just to criticize my housekeeping, I hope." Their sparring was an old habit.

"No, I actually came to spy on you for Mom." Mei turned to her brother with a smile and embraced him warmly. Then she planted a kiss on his cheek and playfully rubbed his goatee with obvious affection. "Dare I ask for cream for my coffee?"

"How's Howard doing?" Lin inquired while rummaging through the refrigerator for something that hadn't yet expired. He felt he had to ask even though his brother-in-law didn't particularly interest him. In turn, Lin knew Howard didn't quite approve of him, either.

Mei's smile indicated that she knew her kid brother was just being polite. "Oh, he's doing well and sends his love."

"Yeah, I'm sure," said Lin as he retrieved two clean mugs from the dishwasher. The sound of the coffee maker and the aroma of freshly brewed coffee filled the room.

Smoke from his cigarette spiraled languidly up through the shaft of light that beamed across the kitchen as Lin studied his sister. Knowing that her temper was easily inflamed, he tried to keep from sounding accusatory. "So you just happened to be in the neighborhood?"

Ignoring his question, Mei wrinkled her nose in disapproval while motioning to his cigarette. "You should really quit that." Her admonition was automatic, as if she'd

said the same thing to him a thousand times before, which she had.

His only reply was an exasperated sigh warning her not to go there. Lin loved his sister and admired her forthrightness, but sometimes she could be a real pain in the ass.

Mei's brow furrowed as she made room for her mug by moving some of the clutter to the other side of the table. She looked around for something on which to wipe her hands, finally ending up using her spotless shorts. Once she was seated, the only sound in the kitchen was her spoon clinking against the side of the mug as she stirred milk through the dark liquid.

"Mom's sick," she stated matter-of-factly without looking up.

Lin raised an eyebrow and blew out a cloud of smoke. "I just Zoomed with them. She didn't look sick. What is it—the flu?"

"Alzheimer's."

"What?" His stomach lurched. "She . . . she seemed fine this morning, maybe a little tired and forgetful, but . . . I can't believe it." He shook his head slowly, as if trying to dispel his sister's declaration. "Are you sure? When did this happen? Did she get a second opinion?" He'd noticed his mother's mental decline, but had attributed it to the natural progression of aging.

"Yes, we've been through all of that: second opinions, CAT scans, neurological evaluations—the works. It's pretty definitive."

"I didn't know anything about it," Lin replied testily. "When were you going to tell me?"

Mei met his stormy eyes. "Lin," she said gently, "this is about Mom, so please don't try to make it about you."

Appropriately chastised, he nodded soberly. "Of course. Sorry."

Mei squeezed his arm as she passed him on her way to check on the boys. When she returned, he asked about their next steps. It dawned on him that his sister looked exhausted, something he hadn't noticed before.

"There's not much we can do," Mei admitted with a sigh. She took a sip of coffee. "She'll continue to live her life as best she can. We'll get her occupational and physical therapy as she begins to need it. Dad has already hired someone part-time to help out around the house. But all of that is just forestalling the inevitable because there's really no treatment. There are a few drugs out there that may be able to slow its progression, but nothing is very effective and certainly not over the long term."

Lin sat in silence, trying to sort through a cascade of emotions. His mother was the one person to provide him with some stability, who always stood by him in spite of the sometimes foolish choices he made. He couldn't imagine her gradually fading away. It must be terrifying for her,

vanishing and not being able to do a damn thing about it. He ran his hands over his face.

"And Dad?" he finally asked.

"Dad's Dad—you know how he is, though understandably, he's pretty upset. I suppose he realizes he's as helpless as the rest of us to do anything about it."

"What about his damn company? With all the money they spend on research, doesn't MedStat have some drug in the works that could help? Has he said anything to you about it?"

Mei shook her head.

"What the hell good is he?" muttered Lin under his breath.

His sister gently laid her hand across his forearm in a gesture of both compassion and restraint. "This is one thing you can't blame him for."

The noisy entrance of the boys, grown bored with the front yard, relieved the tension in the kitchen. The six-year-old embraced his uncle with a warm hug and kiss, but the eight-year-old, in a moment of uncharacteristic sophistication, gave Lin a fist bump. Lin grabbed him and hugged him anyway, and the boy giggled unabashedly.

"You two maniacs want something to eat?" Lin asked enthusiastically, temporarily pushing aside thoughts of his mother.

"Yeah!" both boys shouted at once. Skeptical, Mei glanced around at her brother's kitchen but found little evidence of much that was edible.

"Okay then," exclaimed Lin. "Go get in Mom's car and she'll take us out to lunch." Brother and sister stood up together as the two children raced to the door. Lin reached over and drew Mei into his arms, kissing the top of her head as she laid her cheek against his chest.



After Mei dropped him back home, Lin did his best to ignore the disturbing visions of his mother's face now disrupting his work. He'd been a lousy son, he thought sullenly. He needed to get back to Wellesley to see her. He resolved to be better in the future, but right now the relentless pressures of work reclaimed him.

His deadline was completely self-imposed, but he wanted to free himself from this grinding work commitment as soon as he could, if just for his own sanity. He could finish the beta version of his application before the first of the year if he pushed himself, but anxiety over his mother's illness kept invading his thoughts, making it impossible for him to concentrate. How can there still be no effective treatment for this fucking disease? Lin couldn't believe nothing was in the pipeline at MedStat. Pensively smoking as he pulled closer to his desk, he tried to recall the last conversation he'd had with his father about the company. The details were hazy because, as with most conversation with his father, Lin only pretended to listen, preferring instead to feign interest rather than argue. What did he remember about their last conversation? His

father seemed uncharacteristically distracted, something about a new drug being readied for FDA approval and giving him trouble. *What was that damned drug for again?* He couldn't recall.

Lin had never bothered to pay much attention to his father's company, knowing he was not expected to take over the reins after his father retired. Although nowhere near the size of a GlaxoSmithKline, Pfizer, or Johnson & Johnson, he understood that MedStat's innovation and agility wielded significant influence within the pharmaceutical community and put them at the cutting edge of some exciting breakthroughs. New drugs were where the real money was, Lin knew, although it seemed to take forever to get each new one to market.

Hell, I might as well take a look. He cleared off a space next to his keyboard and placed a clean ashtray within easy reach. He had to be especially careful; he certainly didn't want to get caught poking around in MedStat's network. He woke his computer, and with a few keystrokes, MedStat's home page appeared on one of his monitors.

"Let's see what's available to the public first," he said aloud, cigarette dangling unattended from the corner of his mouth.

His hazy recollection seemed to be borne out; MedStat was developing a new drug for the treatment of Alzheimer's. *Now, isn't that a damned unlikely coincidence*. The research name for it was AKL-436, but Lin soon learned that some of the researchers had dubbed it Superspeed. *Cute*. Andrew was probably desperate to get it on the market in time for it to be

of some use to his wife, probably accounting for some of his father's recent anxiety.

By following the links, Lin learned that Superspeed was soon to undergo an FDA review, but the information available to the public wasn't detailed enough to be of much help in his research. He would have to dig deeper by probing MedStat's network to find anything worthwhile.

It took all of his skill and considerable luck to locate a researcher's terminal he judged might be susceptible to an attack and could serve as his way in. By exploiting a business-logic vulnerability, he was able to escalate the researcher's privileges to make him an administrator. Lin suspected the system's weakness probably was the result of something that was misconfigured or an implementation bug introduced by human error. *Ah, the human element—almost always an Achilles' heel*. Nevertheless, this was how he entered the researcher's system, and through it, was able to give himself root access to the MedStat network.

As the root, Lin discovered shared network drives from a variety of users, including company executives, researchers, and the tech guys. It turned out there actually was not one, but three drugs under development, two of which were still in the testing phases. For the third, clinical trials had concluded, and an FDA application was being prepared. Lin looked at the description of AKL-436's pharmacology. He was no biochemist, but the narrative looked promising even to a layman like him, and he felt compelled to peel back more layers.

He turned on a desk lamp and noticed the ashtray was almost full. Fatigue began to assert itself, so he decided to conclude his session by installing a rootkit that would trick the MedStat network administrator into inadvertently running it the next time that person logged on, allowing Lin to easily reenter the network through a back door whenever he wanted. He snuffed out his final cigarette of the night and signed off.

Lying in bed and unable to sleep, Lin silently watched tree shadows from his backyard creep across the ceiling. His fading mother regarded him with the blank stare of incomprehension whenever he closed his eyes. Throughout the long and sleepless night, sorrow held him in a fretful embrace, like some disenchanted lover preparing to cruelly break things off.

CHAPTER 3

"Desperado"
(as performed by Linda Ronstadt)



Andrew Pace didn't think of himself as an evil man. He acknowledged his greedy tendencies, but this business encouraged, even rewarded it—greed and gamesmanship. Normally, he could easily deal with both, but lately his nerves were totally frayed. It was almost noon when it finally dawned on him that he'd been pacing in front of his desk for the last hour, anxiety churning his stomach.

His eyes were drawn to the picture of his wife he kept on his desk. Sunny had been one unplanned detour in his carefully orchestrated life, but he didn't regret it, not for a single moment. If he'd been in his right mind all those years ago, he would have married a woman with a pedigree, someone who could have helped his career and improved his station in life. Instead, her Oriental beauty had bewitched him. Their union had upset the old money that sired him, but Andrew didn't care. He was confident he would be making

plenty of his own money and figured Boston's social establishment would come around, and eventually it did.

Yet here he was, pacing like someone recently imprisoned. Andrew had postponed all of his morning meetings; he needed time to think. Think, damn it. There were three new drugs in the pipeline, a circumstance that normally would have thrilled him. Their potential marketability was a real tribute to him, and as the newlyminted CEO of MedStat Pharmaceuticals, he hoped their success would enhance his credibility and strengthen his influence with the Board. He'd been working diligently to make sure all three drugs received FDA approval, a challenge he should have relished, but couldn't.

He collapsed heavily into his chair and leaned back. MedStat had set its sights on one drug in particular—AKL-436—to become its new signature piece. Andrew, himself, had fast-tracked the research and testing of this new Alzheimer's drug in the hopes it could serve a dual purpose—stem his wife's mental deterioration and provide him with the money he would need for her care, gleaned from his percentage of the profits and an inevitable bonus. But until AKL-436 was approved, Andrew could only watch the disease cruelly ravage his wife's poetic spirit and at times leave her staring blankly into space. He helplessly stood by as she searched in vain for those simple words that became increasingly difficult to retrieve each day. The relentlessness, the very inevitability of the disease, was what made it so brutal. Nobody's life should have to end like this.

Now, ten years in development and almost a billion dollars later, AKL-436 was so close to being realized. Realistically, he knew that by the time the feds finally got around to approving Superspeed, the Sunny he loved probably would be nothing more than a memory, but it was worth a shot.

Andrew squinted at the most recent progress report displayed on his screen. It confirmed that Superspeed exhibited unprecedented success during early clinical trials—so much so that in a preliminary meeting with the regulators, Andrew, like some self-deluded charlatan, had personally stood before the FDA committee and proclaimed the drug was both effective and safe. That was the challenging part. Once approved, commercialization and distribution would be easy because MedStat had worked closely with the major pharmaceutical distributors for decades. Thus, moving Superspeed into the marketplace would simply be a matter of making a few phone calls. Andrew already had MedStat's manufacturing division poised to produce millions of doses.

He now found himself standing at his window, staring sightlessly at the Boston skyline. Early last year was when things first began to fall apart. The overworked and exhausted researchers had suddenly hit a snag, and Andrew was forced to calm their panic while quietly suppressing his own. The research team reluctantly confided in him that some of the long-term trials were producing anomalous outcomes that appeared to be both serious and irreversible. Dosages were changed, the formula was repeatedly tweaked, and treatment regimens were adjusted, but nothing seemed to help. Some goddamned hitch in the chemistry now threatened

all of his efforts. Well, that was unacceptable, unimaginable. He felt betrayed that, as the most stalwart proponent of Superspeed, both his reputation and personal fortune were now at stake. He couldn't . . . he wouldn't let this happen.

Andrew couldn't put his finger on the exact day things had gone off the rails for him personally. He couldn't recollect whether he'd actually made a decision or if he'd let panic decide for him. It'd been easy enough to identify the researchers with questionable moral standards, those who wanted to make some extra cash off the books. Under Andrew's watchful eye, each day's numbers were quietly adjusted just enough to improve the results. Unfavorable test data were encrypted and stashed in a hidden place on the network, never to be seen or questioned by the quality assurance officers. Why the hell had this been so easy, so easy that his conscience never had the chance to stop him. Now it was too late. But even if someone were to find out about the fraud, Andrew was prepared to pull his money out and quickly disappear with his wife. In her condition, Sunny wouldn't ask too many questions.

The sound of a phone ringing on his desk startled him.

"Pace here."

"Andrew, how have you been? This is Grigory
Bortnik." A polite pause allowed him time to search his
memory. With a hint of a Russian accent, the voice on the
phone was familiar, albeit one he hadn't heard in well over a
decade. Grigory had been a classmate from their Berkeley
business school days, but neither of them had made much of

an effort to keep in touch over the ensuing years. After all this time, the call aroused Andrew's suspicions.

"Good to hear from you, Grigory," he replied guardedly. "It's been awhile."

"It certainly has. How're Sunny and the kids doing?"

Deflection seemed the most appropriate response to this relative stranger. "The family's fine. Both kids ended up in California, so we don't see them as much as we'd like."

"I'm glad to hear that everyone's doing well." Grigory paused as if composing his thoughts, then continued. "Even though we haven't been in contact for a while, I've been following your progress over the years, Andrew. I see that you've recently risen to become chairman of MedStat. Congratulations. I hope those stockholders aren't putting too much pressure on you. I know how stressful that can be."

"Thank you." Out of habit, Andrew glanced at his watch and lied. "Say, Grigory. I'd love to talk, but I'm on kind of a tight schedule. If you're in town, maybe we could meet for a drink after work sometime later in the week and catch up."

There was a curt laugh at the other end of the phone. "I was thinking more along the lines of having lunch today if you're not too busy. I'm headquartered in town, you see. I've been using Boston as a home base for several years now. In fact, we're located just a couple blocks from your offices. I'm sorry it's taken me so long to get back in touch with you.

"Listen, why don't I pick you up, and we can grab a quick bite?" When Andrew didn't respond, Grigory quickly continued. "I have something I'd like to discuss with you, and I think it would be better to do it in person. Let me send my car around to pick you up in, say, fifteen minutes?"



Before long, Andrew was eyeing a middle-aged version of his former classmate over a dry martini. Grigory's slender frame had become less angular over time, and his face, although more jowly, had taken on a predatory look that made Andrew uncomfortable, a feeling unmitigated by Grigory's smug smile. His dark hair was thinning, and his skin wore the glow of a salon tan, but his suit looked expensive, and his manner exhibited plenty of confidence.

"We're going to have to make this quick because I'm pretty tied up today," reiterated Andrew. "We're pushing to get a new drug approved, and it's been monopolizing most of my time."

Grigory cocked his head. "You always were a man on the move, Andrew. Too bad neither of your children wanted to follow you into the business."

"Ah, well." Andrew's sigh was plaintive. "Neither of them has the temperament."

"Yes, children can sometimes be—how shall I phrase this—disappointing." Grigory smiled sympathetically and shifted slightly in his chair. "I don't mean to minimize your

disillusionment by changing the subject, but I've been reading about this new wonder drug that MedStat's developing. They say it's going to be bigger than Prozac and Viagra put together." Again, he paused for Andrew to reply, but when his lunch companion simply raised an eyebrow in response, Grigory continued. "How's the FDA application going for you?"

The question was puzzling. People outside of the business usually weren't aware of the complexities of the drug approval process, and they were unlikely to bother tracking the circuitous progress of a specific drug. The expression on Grigory's face, along with his reputation for mendacity, made Andrew think that Bortnik knew more about MedStat's business than he was letting on.

"We're making progress." Andrew's reply was noncommittal.

Grigory began toying with his napkin. "Andrew, let me be frank. I'll be the first to admit that I don't understand much about the pharmaceutical business. However, I do have my sources, and they tell me there may be a problem with—what do you call it—AKL-436?"

Andrew's face remained impassive, but he couldn't keep himself from leaning slightly forward in his seat. "You must have some fucking well-placed sources, Grigory."

"That's my business, Andrew—to know where there's money to be made, and drugs are big money." Grigory's smile was malevolent.

"What exactly are we talking about here, Grigory? Pharmaceuticals or drugs?"

"Either or both—it depends."

"On?"

"On what you need."

From what Andrew remembered, Grigory had no compunction about operating on either side of the law as long as he could make a healthy profit doing it. Grigory obviously recognized Superspeed's potential and he wanted a piece of it.

Perhaps the timing was serendipity more than coincidence or fate. Andrew desperately needed a new plan, and Grigory had one. By the end of their meal, a deal had been struck. MedStat's new CEO let the Russian pick up the check.



Andrew didn't need to know much about their plans to be of help, Grigory reasoned to himself during the ride back to his office. Besides, his former classmate was likely to get in the way if he were too heavily involved. The Russian knew how these American businessmen were—arrogant but a little too curious. Besides, what Grigory really needed was access to the right information, information that he knew Andrew wasn't prepared to give him just yet. Exerting the right type of pressure might persuade his old friend to turn it over, but it was better to reserve all of that for later. Besides, Grigory had

already found a suitable work-around, should Andrew offer resistance. He speed-dialed Kara's number.

"Kara, how are things shaping up?"

"Good," she quickly assured him. "I've identified a programmer who can get us everything we need."

"Is he cooperating?" Grigory lit a cigar and cracked the tinted window to let out some of the smoke.

"He's on the verge. In another couple of days, I think I'll be able to get him to do whatever I want."

"Yeah, you can be pretty persuasive, as I recall. How much is left?" Grigory had gone to extreme measures to obtain eighteen experimental doses of AKL-436; it was his entire supply, at least for the time being.

"Don't worry. He's only getting one injection a day, so it should be fine. I even have enough to up his dose if I have to."

"Excellent." Grigory exhaled a cloud of blue smoke.
"You managing to have a little fun with this?"

"Let's just say I'm enjoying this job more than I expected."

Grigory smiled to himself. Kara was not only beautiful but also impressively single-minded. He'd met her in Las Vegas while she and a couple girlfriends were celebrating their graduation from college—Vanderbilt, as he recalled.

She was smart, too—smart enough not to ask too many questions. Although he could tell she wasn't physically attracted to him, she'd been plenty attracted to his money and quickly moved into his Vegas hotel suite. By the end of that summer, she was prepared to do just about anything he asked.

Now she was working the mid-Atlantic region for him. She had her ways, bless her little black heart. That poor programmer didn't stand a chance. Besides, if things needed to get rough, Alexei was there to help out.

"Well, good for you. Listen, Kara, I'm gonna need those files by the beginning of next month. That gives you two weeks to get the job done."

"Not a problem."

"That's my girl." Grigory hung up without saying goodbye. Kara had been able to achieve inspired results with every assignment he'd given her thus far and this one was right in her sweet spot. Even though some in his organization were uncomfortable with him using a woman who was not from Mother Russia, he was confident she could keep his scheme moving forward.

Kara and her programmer were just one aspect of a multifaceted plan Grigory was executing. Things were becoming more complicated with each passing day, but it didn't bother him. He was used to juggling many balls at the same time. Juggling was a required skill for his job. True, the multi-tiered potential of this Superspeed certainly made his life more challenging, but that was what he enjoyed. He had

plans to tap into every attribute the drug promised—virility, mental clarity, and therapeutic effectiveness—all packaged nicely into a dose that quickly became addictive. He couldn't have thought up a more perfect product if he'd designed it himself, but he hadn't had to; his friend Andrew had already taken care of that.

Thank you for your interest in *One Finger on the World*. If you enjoyed this sample and want to find out what happens, please visit my website (www.kmakeig.com) to purchase the book, either in paperback or as an ebook. While you're there, you might want to check out my new historical thriller, *Anything That Moves: The Conscience of a Radical*.