



# Rice Tea

- Julien McArdle -

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**Cover Photo by Nintaro.**

*In memory of Steve Cisler.*

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## Introduction

I would like to thank you for having purchased this book, though if you're anything like me, you've probably downloaded it for free as you contemplate whether it's worth your monetary support.

This book has come a long way from the six-page film concept that I originally concocted sometime in late 2006. Originally slated to be a realistic take on the 1995 film *Hackers*, this project evolved to become an entirely original story on its own.

If there is one thing that hasn't been affected by the metamorphosis from a screenplay to a novel, it is this work's adherence to reality. While the overarching story line may be fictitious, virtually all the events described in this novel are not. They mirror the true experiences of those talented few that populate the digital tubes.

To that end, I would like to acknowledge the following for their valuable contributions on the interwebs that helped shape this novel:

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ONE

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## Enter the Blackhat

In the windowless basement of a suburban home, in the wee hours of the morning, sat a twenty something man perched over the glare of his multiple computer monitors. In the one, he was playing some Hentai – at this point, the animated high school girl was giving off high-pitched squeals typical of the Japanese genre as she was being thrust into by her male compatriots.

However, at this point, the hacker wasn't paying any attention to the video. Rather, all his attention was focused on his other monitor. In it, he had a terminal window open in which he was issuing commands, the green text of his typed words set on a backdrop of black.

The desk on which his computer lay was pristine – his monitors and speakers were placed in perfect symmetry, the flat surface completely devoid of dust. This was an anomaly in this basement room, with the rest in utter disarray. Clothes were strewn all over, the posters were peeling down, and used cans of caffeine energy drinks peppered the floor. In this mess were also various technical books, usually opened to a certain page, on topics such as C programming and the TCP/IP protocol.

The hacker entered a few final commands in the terminal window, and sat back watching the screen spurt back copious amounts of text. The man smiled in relief. It was working, and on the first try. He had succeeded.

TWO

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## Just Another Morning

Seth lay in bed, his alarm buzzer still ringing by his side. His head turned to face the source of the annoyance, and with it, his arm came violently down to silence the contraption. The buzzer continued. He had missed. With a sigh, Seth took a better look at the alarm and navigated his fingers carefully around its buttons. With a small tap, the room turned quiet.

Seth was an average height, average build, 22 year old. His face featured brown hair and green eyes, the latter usually complimented by his stylized translucent glasses.

Slowly getting up, he turned his head to look out his window. His room on the upper floor provided a nice view of the greenery behind his townhouse, a rarity in the bleak asphalt and concrete landscape that surrounded him.

After a quick shower, Seth put on some clean clothes and worked his way down the stairs. He turned to go into the living area, or the “man center” as he sometimes called it. Against the wall stood a large second hand television, to which game consoles of all sorts were plugged in – between him and his two roommates, they owned all of the most recent gaming hardware. Beneath the television and the consoles lay a hefty rack-mount server, that would appear to be more at place in a data center than a residential home. To the side of this humming machine was a laser printer, with a single freshly printed out sheet.

Seth snatched the sheet, and brought it to the kitchen. Inside, he found his roommate cooking some eggs. Grabbing a lone magnet on the fridge, he posted up the piece of paper. The sheet was the product of Seth's boredom one afternoon, an automated script on the server that would run every morning at 6:30AM. It compiled weather information with the day's top tech headlines and some statistics about the server's current performance.

On this day, much like those before it, news of the Météo botnet were making the rounds. A new update had been released overnight, and more than 120,000 computers had thought to have been infected in the space of hours. While these newly enslaved machines might seem fine to their owners, they would in fact covertly be used to relay spam or assist in large-scale fraud operations. This was bad news for system administrators the world around.

Seth's focus was however not in these news, but rather the breakfast he would make himself. As soon as he had pinned up the sheet, he opened the fridge door to reveal its lackluster contents. He grabbed the loaf of expired bread, and put two slices in the toaster. Turning to his roommate, he asked:

"How was the LAN party last night? I didn't see you come in."

"Yea, we went for some karaoke after. We beat Carleton U's comp-sci team again." Always glad to hear when the other university in town had been beat, Seth replied "Good stuff."

Seth ate his toast, loaded up his MP3 player with some new songs, and prepared his bag for school. On his way out, he yelled back "I'll get the mail!"

## THREE

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## University

It was perhaps early spring, but with the sun beaming down it felt almost like summer. The snow that had been so pervasive the month previous had entirely disappeared. People were no longer shackled by the heavy winter coats that were a necessity even the weeks before. Seth felt unusually liberated as he wore his light-jacket on his twenty minute walk to the nearby transit station.

The transit system in Ottawa was a hybrid of diesel buses and light rail. Every morning, Seth would walk to the nearby station where he would grab a train down to his university. Over the years since his move to this city, he grew fond of the transit network's efficiency.

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After a twenty-five minute ride, Seth's train stopped right on front of his campus, and he got off. A large sign, written in both English and French, welcomed him to "Canada's University." He had always found the University of Ottawa's bold assertion rather amusing.

Walking through the university center, Seth stopped to grab a coffee. French vanilla, as per usual. As he poured in a bit of milk, he looked up to a nearby mounted television screen at the news. The price for the barrel of oil had again increased, and three analysts were feverishly debating the source of this latest hike.

“Seth!” Seth, shaken out of his television-induced stupor, looked around. A young man was fast approaching him. He was built, his goatee well-trimmed – the man looked like a twenty year old version of a Hollywood top actor.

“Oh hey Jinks,” Seth replied unenthusiastically.

Jinks went on. “So I tried hacking that 127 dot whatever IP address you gave me yesterday. I used Sploitster and everything.”

“Find anything interesting?” Seth responded.

“Yeah! Check this out!” Jinks pulled out a newspaper from his side, practically shoving it into Seth's face. Jinks continued. “It was an ATM!” Seth was still readjusting his eyes to read the newspaper held up so close to his nose.

“Look!” Jinks exclaimed. “It spewed twenties randomly on the ground somewhere in hick-town Saskatchewan. That was me!”

The Internet Protocol address Seth had given to Jinks was a loopback – it was a specially assigned address that would connect Jinks to his own computer. Jinks couldn't of accessed any other computer using it, much less an ATM. That was the thing with scriptkiddies like Jinks: they knew how to use certain programs to cause damage, but they didn't know the most basic tenets of computing.

“Uh huh, nice. Look Jinks, I gotta go to the washroom. Classes start in three minutes. I thought you had some now as well?”

“Yeah, well just one – Polish cinema. I should go too. Later Seth.”

“See ya.”

Seth threw the remnants of his coffee in a nearby bin, and walked to the nearby door. Past the door were large concrete steps that brought students to the lower level of the university center.

Seth walked down the steps. At the bottom of the stairs, he could see the washroom doors in the distance to his left. Turning in the opposite direction, he headed down a long hall, an into an open doorway which greeted students halfway down. He had come into the dark, funky smelling, dungeon that was the university's arcade. Save for a lone light hung atop of an old pool table, the room was entirely lit by the hyperactive screens of its coin operated games. Seth figured that most of these machines had to be at least twenty years old, but these retro games were cheap to play and had really caught on with the campus' students.

Seth walked up to the *Street Fighter II* slot arcade machine, where two students were furiously shifting their joystick and mashing buttons trying to beat each other's virtual characters to a pulp. Seth, looking at the taller of the two players, subtly pronounced "Gab, we got class in less than five." The message received no reply, the player's attention entirely consumed by the machine. However, the pattern of prerecorded pained grunts emanating from the game's characters started to shift, and within seconds, Gabriel had dealt the finishing blows. He looked back at Seth.

"Okay, I'm done."

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The duo walked with utmost haste down the halls of the university's computer science and engineering building. It was amongst the newest structures on campus, with a design that proudly showed off its support beams and heating ducts to all its patrons. It was also home to numerous computer labs, rooms filled with networked computer stations.

Stopping by one of the doors, the two quietly entered. The professor in the midst of discussion paused for a brief second at

the interruption, glaring at the two late-comers. Seth mouthed his apology to the unimpressed teacher, who then continued on his lecture. The two found some empty seats near the back and listened to the professor, slowly getting their bags off their back as to not produce any further noise.

The professor went on. "This term project is worth 30% of your final mark ladies and gentlemen, so listen up." Seth logged into the computer on front of him, paying only half-attention to the words of his middle-aged lecturer. Looking off to the side of his computer monitor at his fellow classmates, Seth's eyes couldn't help but to fixate themselves at the girl sitting half-way down the room. Her name was Kerstin. She had a rounded face, shoulder-length black hair arranged in a ponytail, and a very cute European accent that came out whenever she asked questions. To top it off, she was an extremely competent programmer. Whereas others wrote limiting textbook answers to the problems given in class, she was one of the few that could think outside the box and develop intriguing efficient solutions.

The professor's unintelligible droning voice was punctuated by Gabriel's clear whisper.

"I think you're freaking her out."

Kerstin was staring back directly at Seth. Abruptly shaking out of his apparent daydream, Seth's eyes immediately returned to the idle screen on front of him.

"Fuck," he muttered.

"Not bad," said Gabriel. "You haven't even met her yet and she already thinks you're a freak. It only took you what – three months?"

"Yeah, thanks." Seth replied with a smirk.

The professor went on for some time on the minutia of memory management in operating systems. Finally, alerted by the communal ruckus of students packing their bags, the lecturer took a look at his watch.

“Oh look, we're all out of time. See you next time, and take a look at the assignment due next week!”

Stretching his arms, Gabriel looked to Seth. “Are we still on for the beers?”

“You know it.”

“See you there in what... ten minutes?” Gabriel continued.

“Sounds good to me,” replied Seth.

FOUR

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## The Digital Losers

Seth sat waiting at a table at the local university pub, *1812*. It was one of his favourite hangouts. Not only did it provide a great view of the campus, but the beer was decently priced, and it was rarely home to more than a few patrons.

Coming by with two beers in hand, Gabriel sat down, sliding one of the alcoholic beverages to Seth.

"Thanks."

The duo took out their laptops, and flipped them open. As he was waiting for his laptop to boot up, Seth began speaking. His gaze did not shift away from his laptop screen.

"You know, I'm really going to miss all of this."

"Miss what?" asked Gabriel in return, as he sipped his bottle.

"University. All those parties. The stupid shit we've done. Feeding the hamster weed. Or like after Christmas - making roadblocks with the trees people were throwing out."

"...or using the trees as poles in joust tournaments," countered Gabriel. "It went by fast, didn't it?" he finished by saying.

"Yeah, it's depressing," concluded Seth.

"It doesn't have to end though. At least not that fun stuff."

Gabriel looked back down at his laptop. It had now finished starting up and was standing idle. He began typing a few commands.

"Let's see what kind of catch we have for today," he mused.

Gabriel's laptop was connected to the nearby wireless repeater, a device to spread the specialized digital signals across campus so that all students with a wireless-enabled laptop could instantly log on to the Internet. All computers connecting to the repeater were added to a pool of networked computer, which all accessed the Internet via a central gateway. This was entirely automatic, and so the average student wasn't aware of all the technology that made this seemingly magical Internet access possible. This also meant that they were quite unaware of the extent to which their computer was made vulnerable by subscribing to such an open network.

Gabriel didn't need any specialized programs to explore the hard drives of the computers that had connected to the network. All from his seat at the pub, he could explore dozens of computers at will, logging into them much in the same way as a legitimate user. Gabriel's seemingly limitless access was based on the fact that most computer owners did not bother to set an Administrator password. Over the Internet, such an omission would not be a problem. But computers treated local networks differently than they did the Internet, and such an oversight made these machines extremely vulnerable. To people like Gabriel, the contents of these machines were as good as his. There were a few computers whose passwords had been set, but there were ways of thwarting those too.

Poking around the hard drives of various machines, Gabriel soon found something of interest.

"This guy's interesting. Looks like a prof's slides for a class."

Seth was now looking over Gabriel's shoulder. Looking towards Seth, he asked,

"Shall I?"



Sometime in the next month, a professor was giving a lecture in one of the university's many halls. His carefully prepared slides were projected to the front. The professor spoke to his students.

"...and so the biota in these sedimentary rocks can serve to identify the local conditions in the environment of deposition."

With these words, he moved to the next slide. The class of 400 students erupted in laughter. Puzzled, the professor looked back at the projected slide. Instead of the images of microscopic life he had prepared, there was a single repeating video clip of a bug-eyed hamster giving a very human-like look of surprise. Beneath the video was a short caption: "Brought to you by the Digital Losers."

The Digital Losers was the name that both Seth and Gabriel had given themselves to mark their pranking exploits. It had served them well since the duo had come up with the name in their second year of university. The two also maintained a website where they regularly published their latest exploits, often accompanied with audio clips or video footage.

The professor hurried to his nearby terminal to look at his slides, and drew a quiet sigh of relief upon seeing that all his slides remained intact. This rogue slide had somehow been inserted amongst the legitimate content, but none of the real slides had been affected.



Back at the pub, both Seth and Gabriel were still working on finishing their beers.

"I'm tempted to start university all over just so I can stay here," said Seth.

“Get a master's.”

“I could...” Seth went on, “but as weird as this sounds, its the social experience of getting raped in my first year classes that I miss most.”

“Yeah, that is weird.”

“Thanks... oh hey, I got a guy here.”

Seth, who was also doing his own sleuthing, had stumbled on another professor's computer. He looked around the computer's various files, and discovered some slides dated to be presented in the coming week.

Taking a look at the file containing the slides, Seth saw that it began with a pie chart presenting the break down of the last midterm. In this calculus class, forty-three percent of students had failed their examination, and the professor was ensuring that they all knew it. Editing the text in pie chart from his laptop, Seth changed the wording from “Failed Midterm” to “Sucked Ass.”

As Seth was performing the edits, he continued to speak with Gabriel.

“I have been giving this second degree a lot of thought. Biochem was not the major I should have taken. I want to go into computer engineering.”

“How many more classes would you have to take now if you wanted to make the jump? How many have you not taken?”

“I'd still have two more years to do.”

Gabriel gulped down the remainder of his beer. Looking at the empty state of Seth's own drink, he asked, “Want another one?”

“Sure,” came the reply.

FIVE

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## Kerstin

It was Friday morning. Seth lay in his bed, the low rumble of his snoring emanating from his throat. Suddenly, the cellphone by the alarm clock to his side started to vibrate in loud intermittent bursts.

The snoring stopped, replaced by a loud sigh. Seth blindly grabbed the phone, and putting the screen to his squinting eyes checked to see who was calling. He pressed a button on the cell, and in a tired voice said,

“Hey mom, how are ya?”

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As Seth went to his classes that day, he was unable to shake the thoughts of Kerstin out of his mind. He wanted to know more about her, but there was nothing to go by. They had no common friends with which to approach, and searching her name online had yielded nothing.

Later, as he walked down the bustling halls of the university with Gabriel, Seth stated,

“I think I’m going to ask her out.”

“Who? Kerstin?”

“Yeah. But whatever chance I had I think I killed it by staring at her for an hour straight without realizing it.”

Gabriel paused for a second, and remembering of an even that was to take place the upcoming weekend, said,

"So how about this: I'll invite her to the Saturday hackfest."

"She'll say no," was the quick reply.

"If it's you asking her, then maybe. Or okay, most probably. But I bailed her out with her on that microcontroller project. We've worked together a few times. Who knows, she might say yes."

"Mmm." was the resilient half-reply from Seth.

Gabriel stopped walking and looked straight at Seth.

"C'mon. You have nothing to lose. Want me to ask her in class?"

Seth conceded.

"Sure."

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Seth had installed himself in one of the rear seats of the computer lab. The professor was at the front, preparing the slides on his computer. Kerstin was at her usual seat at the front, with Gabriel at the workstation to her side.

From his position at the back, Seth could see Gabriel leaning towards Kerstin. He couldn't hear what he was saying, but he could see Kerstin turning her head towards his and saying something back. Gabriel then leaned back into place.

Quickly typing into his open terminal window, Seth sent an instant message to Gabriel.

"What did she say?" he wrote.

"She can't make it. Some family affair." Gabriel wrote back.

Gabriel could then be seen typing something else in his own terminal window. Gabriel stopped, and Seth received another message.

"Sorry bud," it said.



Seth's disappointment was further compounded by the fact that he had to work that evening – something he didn't particularly look forward to doing on this day. Still, he thought, work was money. So like the other students that were employed at this university coffee joint, he donned the green apron and concentrated on feeding the caffeine addicts their overpriced lattes.

Coming home that night, Seth opened his townhouse door to see his roommate playing a game in the living room. Glancing back at Seth removing his shoes in the doorway, he asked,

“You ask her out?”

“Yes,” Seth produced, with a sigh.

“That bad eh?”

Seth smiled back at him, but said nothing.

“Want to play a bit?” his roommate asked.

“Sure.”

Seth approached the console, and the two began to play together. Within seconds, Seth's preoccupation with Kerstin had faded into the flashy colours of his television.

SIX

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## Weekend Fun

The morning sun was shining in Seth's room, and for the first time in what felt like an eternity, his alarm buzzer had no need to go off. Substituting the potential shriek of the alarm, however, was the sound of a chainsaw as a man trimmed a tree in the greenery behind his home down to size.

Seth lay in bed, the pillows squashed against his ears. Various scenarios of gruesome deaths for the worker quickly filled his mind.



Seth spent the day doing the small things he had usually lacked time doing during his busy weeks. He went and did his groceries, he washed the pile of clothes hidden behind his door, and he read up some pages from his text books.

Late that afternoon, he biked over to Eric's place. He lived in his parent's single-storey home, in a nearby residential neighbourhood. Seth had first met Eric through one of the local hacker meetings that took place every month, but over the years they had become good friends.

Walking through the house's unlocked front door, Seth proceeded down the nearby steps. He could hear the discussion and the laughs emanating from the basement. "Hey guys!" he announced walking down.

Gabriel, Jinks, Eric, and a few others were in the basement. Laptops were strewn on the floor. Looking up at the new arrival, Gabriel said, "Hey! We're just watching the tail end of the new Binary Phunksters episode."

Eric's basement was a true computer enthusiast's den. Old system motherboards were hung on the walls as decoration. A disheveled desk was nearby, with an open monitor and computer parts laying on its surface. By one wall was Eric's true pride and glory: a six-foot tall mainframe server. This behemoth was considered obsolete by the data center to which it was previously home, and yet, it still sported more memory and parallel processing power than any modern desktop. Eric had managed to snatch this monolith for a mere two thousand dollars.

The guys, some sprawled on the couches, some gazing at their laptops, were all facing the projection on the wall. Eric was playing hacker shows being broadcast over the Internet. Seth sat down to join them. Taking a beer from the reserve in his bag, he flicked the imported aluminum can open, and looked up to the animated wall.

In this episode of *Binary Phunksters*, its hosts, Flow and i0, were detailing a prominent security flaw with the design of certain cellphones. As a demonstration, the duo walked down the fashion district of their native Toronto. Stopping on front of a store, they were able to turn the cellphone of an unwitting client inside into a virtual eavesdropping device. With a few keystrokes of their laptop, the voice of the client was heard over the machine's speakers. The victim was speaking with a strong lisp, discussing the importance of tie colours with a clerk. Flow and i0 finished the show by recommending basic security measures to avoid falling prey to the same kind of digital

hijacking. The duo then signed off and a quick bout of end credits aired.

The projector screen turned to black, and the synthesized voice of a female came on. "Next on rootTV," it said, "Hacker Jeopardy."

"I'll get another beer," said someone.

The introduction to Hacker Jeopardy began. The sequence showed footage of the various sights of downtown San Jose, part of the American Silicon Valley where the show was based.

The doorbell rang.