

THE

IRON



WARRIOR

S2026 Issue 1



# MEET THE TEAM

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**THE IRON WARRIOR**

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# THE IRON INQUISITION

*“Are you excited for the World Cup? What are you looking forward to the most?”*



“I’m excited to see how England will find a way to lose in penalties”

PANTH, TRON 2B



“I can’t wait to see Canada lose to Portugal in Round-off 16”

HIMANSH, TRON 2B



(starts singing Speed’s World Cup Song) I’m excited for the World Cup and watching the games in middle of my lecture”

HUZAYFA, TRON 2B

# Letter From the Editor: Hellooooo Summerloo!!

Yasmin Abu-Narr, 2B Mechatronics

IT'S  
SUMMER  
TIME !!

Hello, and welcome to Summerloo 2026 edition! I am this term's Editor-in-Chief of the Iron Warrior and I am so excited for the term ahead! Summer means great things: ice cream, sun, outdoor sports, gardening, ice cream, flowers, picnics... Did I say ice cream? Summerloo is an environment I have yet to experience. This term is my first summer term, and I will say I am jealous of the Stream 4 kids who get to experience summer term more than once. It is so much nicer being outside, being with friends and having the sun out past 4 PM. In this article, I want to highlight some amazing events and activities that will be happening in Waterloo this term. Also, I've added places that would be nice to visit in the warm weather, both on campus and off-campus. So strap in for this curated list, and get ready for a term of fun!

## OFF-CAMPUS

### 1. Waterloo Art Market [1]

This art market features handmade goods and local art. It's hosted in the Waterloo Public Square and runs from 5 PM - 9 PM on July 24 and August 14. Who doesn't love an outdoor arts market in the summer?

### 2. St. Jacobs Farmer's Market [2]

Although this famous Waterloo destination is open year-round, the St. Jacobs Farmer's Market is a sight to be seen in the summer! Strolling through stalls of fresh fruits, veggies and homemade goodies is bound to make any heart flutter with joy!

### 3. Movies in the Park [1]

Movies in the Park combines the two best things ever: movies and parks. This event is being run multiple times throughout the summer in the Hilltop Picnic Area. The dates are as follows: June 11, 18, 25 and July 9, 16, 23 and August 6, 13, 20. The movies will be announced closer to the dates so stay tuned! This event is in support of the Food Bank of Waterloo Region so don't forget to bring a non-perishable food item!

## ON-CAMPUS

Now that we've looked at some off-campus events, here's a list of places on campus doing special events/features for the summer!

### 4. EV3 Cafe introduces new Summer Menu Items

Ahh, the EV3 Cafe: beautiful, green and delicious! This term they have introduced four flavours of dirty sodas: Strawberry Cream Splash, The Pomegranate Paradox, The Waterloo Spritz, and The Waterloo Wave! They are featured from June 1 to June 30th. Check them out!

### 5. EngSoc's Ice Cream Sales [3]

These ice cream sales are happening in the PSE Foyer from 12pm to 2 pm, on June 11, and July 2. Ice cream makes all the heat go away so go and grab some this term!

### 6. WUSA's FIFA World Cup 2026 Watch Party [4]

And of course, I can't forget the fast-approaching FIFA World Cup hosted right here in Canada. The Canadian men's national team is competing on the world stage again after 40 years, so come out and cheer! WUSA is hosting two watch parties for the term, June 12 from 3 - 5 PM in the SLC Great Hall and June 24 from 3 - 5 PM also in the SLC Great Hall.

### 7. Engineering Day [5]

I saved the best for last: Waterloo Engineers get ready to be PURPLE!! Yearly, Waterloo Engineering students, staff and

faculty come together to celebrate engineering at the University of Waterloo. In the past, this vibrant event included: purpling, BBQ, purple Kool-Aid stations, yummy treats, Dunk Your Prof. Tanks, inflatable games, photo booths and endless fun! You can buy a white shirt from Novelties to Engineering Day for around 10 bucks for the annual purple powder throw. The Iron Warrior will be hosting an EngDay photo contest so don't forget to snap some great pictures and capture the fun!

The summer is the best time to be outside, so make sure to balance your time between studying and enjoying the sun. This list is not comprehensive; there are many events happening on campus and off-campus that students can enjoy. There are also outdoor sports and intramurals happening all term. If you've never tried playing sports before, this is your chance to get outside, touch grass and enjoy being active. Make sure to stay hydrated and wear sunscreen!

Have fun, Summerloo!!

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Photo Credits: @uwhousing (Instagram). Goose family walks through UW.

# Michael, the Misleading Miracle

Yash Gunturi, 3T Biomedical

Michael, the biopic dramatizing the rise to fame of the King of Pop, released April 24, 2026, starred Michael Jackson's nephew Jaafar Jackson in his feature debut. Made on a reported budget of around \$165-\$200 million, the film has grossed over \$800 million at the worldwide box office, making it the second highest-grossing music biopic of all time as of May 31, 2026 [1]. Starting from Michael's early career as a child star with the Jackson 5, and ending with the King of Pop performing at Wembley Stadium in 1988 during his iconic Bad Tour, this story showcased to a new generation why Michael remains on everyone's top five greatest musicians of all time list.

The film was originally cut at four hours before director Antoine Fuqua worked with editors to bring it down to just over two hours, using Michael's most iconic musical milestones as timeline anchors [2]. Throughout the making of this story, the production team ran into countless issues, including a lawsuit regarding a settlement clause with one of Michael's former accusers that barred his depiction or mention in any film about the singer [3]. Many prominent figures did not want to be depicted in the film and had to be cut out. The cast spent 22 days reshooting an entirely new ending, adding an estimated \$10-15 million on top of the original \$155 million budget, leaving roughly two hours of unusable footage in the editing room [4].

## The Family Problem

For a film that is supposed to be an intimate view into the life of Michael Jackson, it fails at capturing his actual family. Randy Jackson, Michael's youngest brother, was left out because he denied his likeness being used in the film [5]. Randy actually became the sixth Jackson member and was even on stage with the band during the Victory Tour's ending when Michael announced the band's disbanding! The movie removed him entirely and kept the original 5 brothers for the whole film.

Rebbie Jackson, the eldest child in the Jackson family, chose not to be in the movie and made no public statement as to why [5].

Janet Jackson, Michael's youngest sibling, is also nowhere to be seen. She had a successful solo career appearing in TV shows and is one of the best-selling music artists of all time with over 100 million records sold. Unlike the Jackson 5, she had an independent career managed by Joe Jackson. It is stated that she was not happy with the movie and had issues with many of the scenes [6].

With these siblings not included, a lot of Michael's home life was inaccurate at best, and fictional at worst.

## Childhood Beatings

The movie portrayed some of Joe Jackson's violent behaviours early on in the film, beating Michael with a belt when he missed a beat or said he did not want to practice. Joe's cruelty extended to all the children in the family, with Michael stating he was traumatized by Joe. During an interview with Oprah, Michael talked about Joe rehearsing with the Jackson 5 and having his belt with him, beating any of the brothers who did not do it right. It was so traumatizing for Michael that just Joe's presence was enough to make him feel sick [7]. Joe continued this method of control well into the children's adult lives, but this was never shown on screen. The movie even goes as far as having a scene where Michael's mother talks Joe down from giving him a beating when Michael was a young teen. Despite this, many content creators and viewers believe Joe's abusiveness is what made the Jackson 5 and Michael's career [8]. The truth is that by the time Michael signed with Motown Records, his genius was already undeniable, and it was Berry Gordy who took more responsibility for growing Michael's career. Michael did not become the King of Pop because of Joe Jackson, but rather despite him.

## Dirty Diana (Allegedly)

Another significant figure in establishing Michael's career was Diana Ross. Michael

joined Motown in 1969 when he was 11 years old. Ross, then 25 and Motown's biggest star as lead singer of The Supremes, was infatuated with Michael. So much so that she insisted he be cast in the movie *The Wiz*. It was on the set of *The Wiz* that he first met producer Quincy Jones, the producer who would go on to produce *Off the Wall*, *Thriller*, and *Bad*, transforming Michael Jackson from child star into the biggest entertainer on the planet [9].

But Michael and Diana's relationship doesn't end there. Michael proposed to Diana in 1981 despite their 15-year age gap; she accepted, but the two never married [9]. In his 1988 autobiography *Moonwalk*, Michael went further, writing that he had always loved Diana and always would [10]. Interestingly, the song "Dirty Diana," released that same year, centered around obsessive love, betrayal, and a woman who pulls men in and destroys them. Though no one has ever officially confirmed the song was about Diana Ross, it is speculated that it was.

Despite this deep history between the two of them being central to the plotline of Michael being hurt by love and feeling lonely, all of Diana Ross's scenes, played by actress Kat Graham, were cut from the final production. The production cited legal concerns with mentioning Diana Ross in the movie despite having filmed many of her scenes [11]. The result is a film that loosely connects Michael to Quincy Jones through *The Wiz* without ever explaining that it was Diana Ross who put him in that room, and never explains the emotional turmoil of Michael's young adulthood.

## Manufactured Man?

Parenting issues are a constant recurring theme in Michael's story. From a young age, Joe Jackson mocked Michael by calling him "big nose", nurturing severe body dysmorphia that would consume Michael for the rest of his life. This is loosely shown once in the movie but not brought up again. However, cosmetic surgery did not start out of insecurity for Michael Jackson. In 1979, after a dancing accident, Michael Jackson broke his nose,

medically requiring his first rhinoplasty. Then in 1981, he went back, stating this surgery was to correct breathing issues, but also resulted in a smaller nose [12]. While the reasoning for his 1981 surgery may be true, many speculate it was for more cosmetic reasons [13].

Many people know that Michael suffered from vitiligo, a skin condition where the body stops producing melanin, resulting in uneven patches of lost pigmentation [14]. The condition left Michael deeply insecure, and rather than go public with his diagnosis, he began quietly covering the first visible signs on his left hand with a glove. His vitiligo is said to have begun in the early 1980s, and by 1983 he had debuted his now iconic rhinestone glove at the Motown 25 special; the same night the moonwalk was first performed. Both the glove and the dance became forever cemented in pop culture [15].

The movie, however, changes the history of Michael's medical records. The movie shows him dealing with both his vitiligo diagnosis and his rhinoplasty in the same scene, immediately after adopting Bubbles, his chimpanzee. Michael did not get Bubbles until 1983, when Bubbles was born, and at which point he had already had both his nose surgeries [16]. By compressing these events into a single scene, the film inadvertently rewrites the very narrative that fueled decades of public speculation about Michael being a plastic surgery addict and skin bleacher.

### The Verdict

The film may have gotten the timeline wrong, left out three of his siblings, erased the woman who launched his career, and glossed over the complicated truth of who Michael Jackson really was. The movie did an amazing job of capturing the true highs of Michael's illustrious career, but failed at accurately representing the darker lows of his life. This article only covers issues from Michael's birth to the end of the movie in 1984/1988; therefore, the creators of this movie still have a chance to correct the latter portion of Michael's life in the second movie announced at the end credits!

All things considered, what no one can deny is the impact Michael has had in reinvigorating the world's love for his music and creativity. As of June 2026, Michael Jackson holds four songs on Billboard's Hot 100, occupies the top two spots on the Top R&B Albums chart, and dominates positions three through five on the Hot R&B Songs chart, with more records to come [17, 18]. As the saying goes, Michael Jackson has fans who aren't even born yet.

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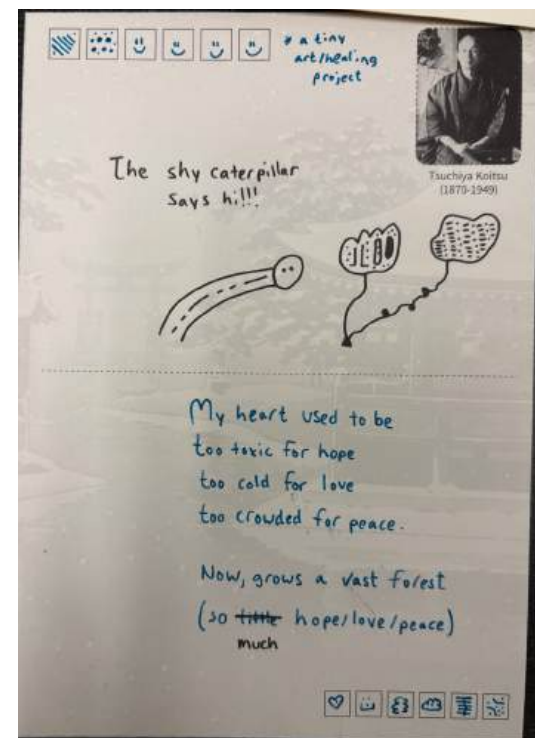
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SUDOKU  
#2026-10

# The Tragedy of the Kitchen Sink: Why Roommate Contracts Always Implode

Aadi Umrani, 3T Biomedical

Every academic term begins with the exact same delusion. A group of bright-eyed, optimistic students sit around a pristine common-room table, armed to draft the ultimate treaty: The Roommate Agreement. Everyone nods politely, smiles, and signs their names to civilized, airtight clauses. Clauses which say, "We will clean the place every Sunday," "We will take out the trash when it is 80% full," "Everyone washes their utensils immediately after use." It feels like the start of a beautifully cooperative, mature chapter of young adulthood.

But the roommate social contract carries a terrifyingly short shelf life. Within weeks, the signed paper is buried under dust, the group chat has devolved into a cold war of passive-aggressive silence, and the common areas begin to fall apart at a scary pace. Suddenly, you find yourself visiting a friend's unit in a luxury high-rise, a place marketed as premium student accommodation with a premium rent, only to discover it has devolved into a slum over the span of four months. There is random stuff strewn across the common areas, the trash can is overflowing along with all the improvised trash cans, and the kitchen has become a haven for anyone willing to do a PhD on life forms. And literally every surface is coated either in an unscrubbable layer of mystery goo, or a permanent white layer of limescale.

So that brings us to the elephant in the room. What causes human cooperation to break down so spectacularly the moment parents are no longer around to act as referees? Is it laziness? Is it work overload? Is it inactive roommates?

Here is where the unique architecture of Waterloo student life comes into play. You don't need a peer-reviewed study to understand this breakdown; you just have to scroll through the [r/uwaterloo](#) subreddit, where threads documenting apartment neglect are

practically a competitive sport. In high-density student hubs like the towers on Phillip, Lester, or Columbia Street, developers have mastered the art of the multi-bedroom suite, squeezing random strangers with completely different definitions of "clean" into a single shared living space. Combine brutal academic workloads, engineering or math co-op stress, relative inexperience with housekeeping, and a complete lack of parental oversight, and you have a perfect recipe for domestic collapse.

It almost always starts with a slow, creeping negotiation with clutter. It begins innocently with a habit psychologists call "temporary placement." You walk into your apartment after an exhausting day of lectures, drop a plastic grocery bag or an empty Amazon box on the floor near the doorway, and tell yourself "I'll put that away later."

But "later" behaves like the limit of a function. The variable keeps approaching the target, but never actually arrives at it. Once an object sits on the common area floor for more than twenty-four hours, it becomes a permanent piece of furniture. This creates a psychological green light for the rest of the unit. If there is already a random cardboard box in the hallway, dropping a stray shoe next to it feels harmless. If the shoe is there, leaving a bunch of empty grocery bags feels like nothing, then comes the empty pizza boxes, or even trash bags. Over a four-to-eight-month term, the floor begins to actively disappear. Walkways turn into narrow hiking trails. The floor stops being a floor and becomes a giant, communal dumping ground for everything people are too tired or too indifferent to put away. It is a physical manifestation of a collective mental shrug.

This environment breeds a specific psychological phenomenon known as House Blindness. When you live inside a developing biological research lab for long enough, your brain entirely stops registering the chaos as a problem. The mess simply becomes the new baseline.

This reality hit me like a physical wall when I went to a friend's place in a local luxury building for a casual potluck, expecting a normal, functional kitchen where I could quickly warm up my food and fry some bread on the kitchen stove. Instead, I stood there holding my food, staring in horror at a room where nobody had cooked a real meal in months. Because they ordered food delivery every single day, the roommates had collectively decided the kitchen was a "dead zone" that no longer required basic sanitation. When confronted, the response is almost always a classic defensive downplay: "Oh, it's not that bad, we just don't really use the stove."

But the state of the kitchen tells a completely different story. The sink tap is broken, the sink drain is clogged with old food remains buried under hard water buildup, and the cookware itself has physically changed from months of neglect. You'll find one pan covered in a sticky varnish of polymerized oil that has literally fused to the metal after being heated and not washed. Right next to it sits the "egg pan," coated in a permanent layer of limescale. The fact that someone can casually fry an egg on top of that mineral buildup without blinking proves the power of house blindness. To an outsider, it's a clear health hazard, but to the resident, it's just a used pan.

So why do smart, high-achieving students let their multi-million-dollar high-rises get so bad? It boils down to a toxic combination of optimistic laziness and a sociological concept known as the Tragedy of the Commons.

When a student lives alone, they know with absolute certainty that if a piece of garbage is on the carpet, it will stay there until they pick it up. The accountability is 100% theirs. But the moment you add roommates, the mental math completely changes. Everyone starts operating under the comforting illusion that they are the clean one, while simultaneously assuming that someone else will eventually break first and clean up the common area. A roommate will walk past an overflowing trash bin twenty times a day, actively

# The Origins of 3D Printing

Ashbala Bhatti, 1B Chemical

telling themselves, "I didn't put those specific boxes there, so it's not my job to move them. Someone else will get annoyed enough to throw it out." Or they think, "The person before me didn't clean up before leaving, so I also don't need to clean up."

The tragic irony of student housing is that everyone is waiting for a person who does not exist. Because every single roommate is practicing the exact same avoidance strategy, the baseline of what is considered an acceptable living space plummets to zero. Eventually, someone decides to break the cycle and do all the cleaning (in some miraculous cases, the other roommates join in due to guilt), or a cleaning company has to be called in to take the honors, after which the room gets destroyed within days. However, in most cases, rooms get messed up to the point that trying to clean them makes the situation worse, and any cleanup takes up a large chunk of your day.

Ultimately, student housing is a crash course in human nature. It proves that no matter how glossy the lobby is, or how premium the rent price may be, a luxury apartment cannot fix a broken social contract. If you don't want your home to become a PhD research lab, someone eventually has to pick up a sponge, and break the standoff.

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SUDOKU

#2026-11

3D printing is defined as a process for creating three-dimensional objects by adding layers of two-dimensional cross sections on top of each other [1].

Deriving its name from its similarities to ink-based printers, it has applications in everything from rapid prototyping to jewelry-making. Its origins, however, may not be as well-known.

3D printing was first invented in May 1981 by Hideo Kodama at the Nagoya Municipal Industrial Research Institute. He was the first to publish literature about the layer-by-layer method of fabrication that is essential to 3D printing. His technology was similar to stereolithography, as it involved photopolymers that used light to harden material. Despite being the first to publish in this field, Kodama did not fulfill the patent application and so was never granted the patent. Another group, Alain Le Méhauté, Olivier de Witte, and Jean Claude André, began a patent application for stereolithography technology but abandoned it due to 'lack of business perspective' [2].

The first to patent 3D printing technology was Charles Hull in 1986, who also invented the first stereolithography apparatus (SLA) machine and co-founded 3D Systems Corporation. He introduced the STL file format, digital slicing, and the first commercial 3D printer, the SLA-1, in 1987 [2].

Others would also go on to file patents for 3D printing technology. Carl Deckard at the University of Texas filed a patent in 1987 for Selective Laser Sintering (SLS), which used a laser to solidify powder polymers. This technology was issued to DTM, Inc. and later acquired by 3D Systems Corporation. Soon after, Lisa and Scott Crump filed a patent for fused deposition modelling (FDM) that used plastic filament and Hans Langer founded EOS in 1989 [3].

The 3D printers around this time were large and mainly intended for industrial prototyping. The first 3D



Photo Credits: adlughmin. (2015). <https://3dprint.com/72171/first-3d-printer-chuck-hull/>

printers intended for small-scale manufacturing were created by Solidscape, founded by Royden Sanders in 1993. These machines made wax molds that could be used to cast objects out of other materials and were popular with jewelry makers [2].

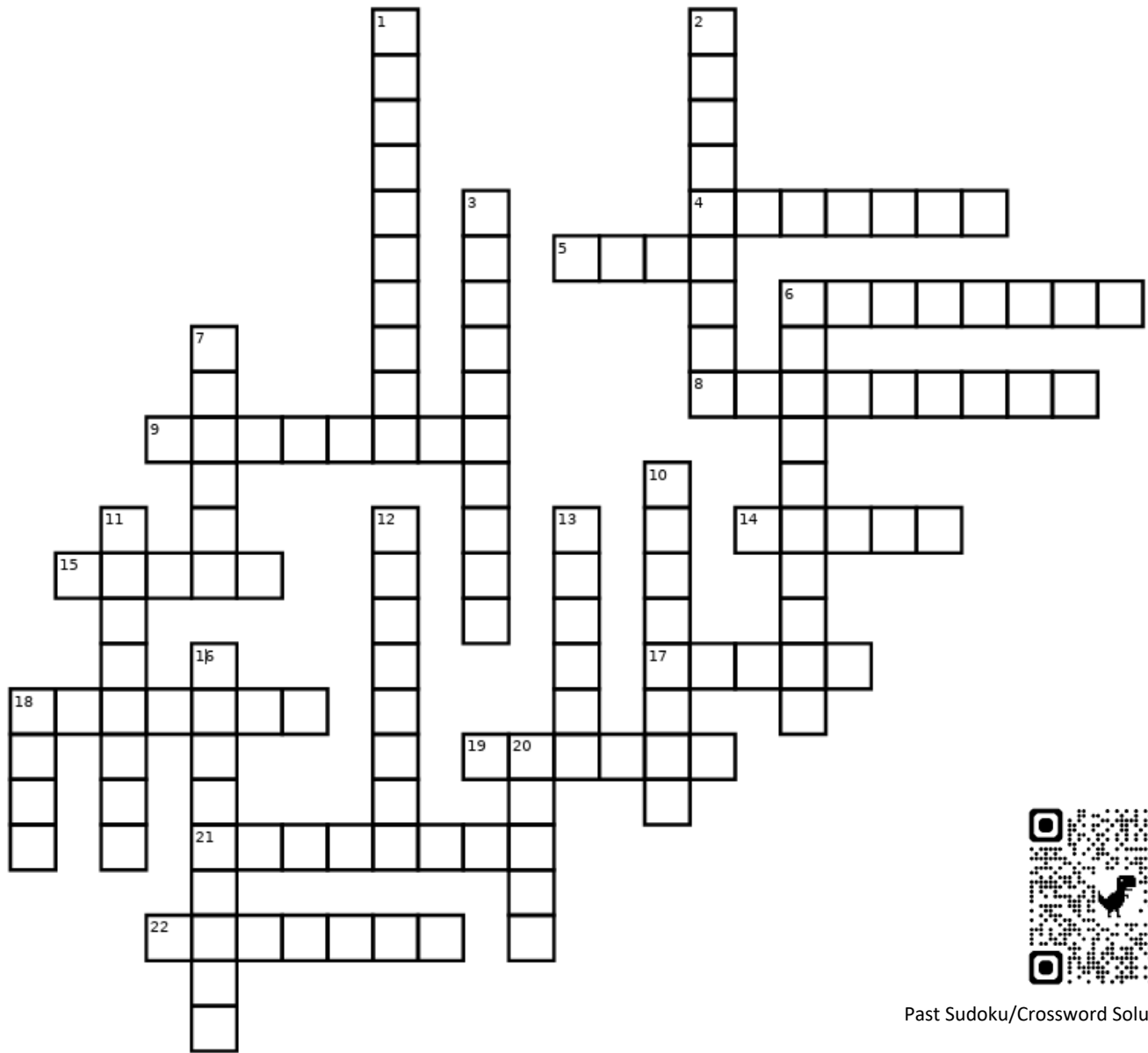
The small-scale FDM printers that are popular today started appearing in the 2000s. In 2008, the RepRap ('replicating rapid prototyper') concept founded by Adrian Bowyer led to the creation of 'Darwin'. It was intended to be a self-producing machine: a machine that could create most of its own parts. RepRap was an open source project focused on spreading low-cost 3D printing worldwide and gained popularity with people editing the designs [2].

By 2019, there was over 170 3D printer system manufacturers across the world including Formlabs, Stratasys, and Prusa, among others [3]. This technology has demonstrated applications in everything from bioprinting to architecture. Today, there is no doubt that people all over the world will continue to find new ways to innovate with 3D printing.

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# S26I1 Crossword



Past Sudoku/Crossword Solutions ^

## Down

1. Structure often built at the beach
2. Casual summer footwear
3. Large green fruit with red flesh
7. Outdoor meal in a park
10. Time away from school or work
11. Popular cold summer drink
12. Evening gathering with flames and marshmallows
13. Colorful evening sky event
16. Equipment used to ride ocean waves
20. Large body of salt water

## Across

4. Glowing insect seen on warm nights
5. Backyard place for swimming
6. Treasure often collected on the shore
8. Lotion used to prevent sunburn
9. Frozen summer treat
14. Small boat powered by a paddle
15. Sandy place to relax by the water
17. Used to dry off after swimming
18. Painful result of too much sun
19. Common food at summer cookouts
21. Outdoor cooking event
22. Sleeping outdoors in a tent