

2024 HUGO AWARD WINNER FOR BEST SHORT STORY

# Better Living Through Algorithms BY NAOMI KRITZER

Read this short story and join Neenah Public Library staff at Lion's Tail Brewing Monday, April 14th at 7:00 pm for a one-hour discussion featuring trivia, laughs, and other surprises. 21 and older.

# **Better Living Through Algorithms**

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by Naomi Kritzer

2023 Nebula Award Finalist for Best Short Story

2024 Hugo Award Winner for Best Short Story

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June was the first of my friends to get into it. This isn't surprising—she was playing Wordle for weeks before Margo or I discovered it. When we met up for our weekly lunch, she kept checking her phone and I assumed it was some new game. Then she put it down with a smile and said, "Abelique told me not to pick up my phone again until after lunch was over."

"Who?" Margo said.

"It's this new app for better living."

"I love the idea of an app that tells you to put your phone down more. For your own good," Margo said, her eyes glinting.

"You should try it!" June said. "You get the first thirty days free!"

"And after that, you have to pay someone to nag you to use your phone less?"

"It's more than that." June took a bite out of her tuna melt. "For one thing, you also agree to occasionally nag other people to put their phones down."

Margo and I both laughed, and June flushed. But she did not, I noticed, touch her phone again until we were ready to leave the diner.

Sometimes, once you hear about a new thing, suddenly it's just everywhere.

It was like that with Abelique. I couldn't un-see it. Or un-hear it, really, because it's not like I was peering over people's shoulders at their phones, I was overhearing people talking about it. Abelique told them to make clam chowder for dinner. Abelique had assigned them a movie to watch. Abelique sent them to bed at nine p.m. It was that last one that caught my attention enough that I actually looked it up. "A complete lifestyle app" was what Wikipedia called it. This was not actually all that enlightening.

"I think it's a cult," Margo said the following week as we were waiting for a table.

"You said the same thing about Pokemon Go," I said.

"Okay, but I was *joking* about Pokemon Go," she said. "Abelique really is a cult. People sign up for this thing and then just do whatever it tells them to do."

"It can't make you do anything," June said, coming up behind us and overhearing.

"So what did it definitely not make you do in the last day?" Margo asked. "Just give us a rundown, June."

"Last night it had me try a new recipe, which was really good, and then it had me watch a movie I hadn't heard of, which was also really good, and then I got my bedtime phone call—"

"Your what."

"I mean, no one's going to go to bed just because an app reminder comes up so there's a phone tree. You get a call, and you make a call."

"You have to use your phone as a phone? I'm out," I said.

"Are you considering trying it?" June said, eagerly. "You should!"

"I don't trust anything that's free for thirty days," I said. "Because I know myself. And I will forget."

"You won't forget with Abelique because you'll get a reminder phone call." She turned back to Margo. "Maybe you could try it, and then write about it." Margo had been trying to freelance as a tech journalist, when she wasn't doing marketing writing to pay the bills.

Margo smacked her own forehead, exasperated. "I'm going to give up on freelance journalism. People keep offering me fifty dollars for something that would take a hundred hours of research. Can we talk about something else? Like that movie you watched?"

June told us about the movie—it had come out about ten years ago, and none of us had heard about it at the time, and it sounded pretty good, actually. Margo looked up a review. June left her phone face down, hands folded primly, looking judgmental. *Cult*, I thought.

Of course, it was only a matter of time before my boss discovered this app and started pressuring me and everyone else in the office to use it.

"It's not a productivity app! It's a wellness app," Keith said, like that made it *better*. (The only thing I hate more than productivity apps are wellness apps.) "It will make you happier! Healthier! I've established three new good habits since I started using it—I floss daily, I have increased my fiber intake, and I go for a walk at lunchtime!"

"That's nice," I said, gritting my teeth and thinking, *Please don't tell me about your fiber intake, Keith.* "I can't imagine how this relates to my job, or why you'd want me to use it unless you think it'll make me more productive."

"Just *try* it for the free month," he said, and remembering that my employee review six months ago had complained that I was *not receptive to new processes* (that time, it *was* a productivity app he wanted me to use—some pomodoro bullshit except instead of a five-minute break you were supposed to spend the five minutes answering email).

I downloaded Abelique and sent a screen shot to my boss because if I was going to jump through this particular hoop, he was damn well going to know I had jumped. I was doing it *on the clock*, too, because I was doing this *for my stupid boss at my stupid job*.

It was a good thing I did it on the clock, because setup took over an hour. The app wanted me to go through a whole slew of questionnaires about my sleep, my mood, what I ate each day, my goals. When we got to goals I checked off stuff about productivity and work advancement, only to have the app re-open the questionnaire with the responses wiped and a note saying, although your employer may have encouraged or even required you to download this app, your use of Abelique is private and we encourage you to use it for your own benefit, not that of your workplace. If it will be useful to you, we can provide you with a usage report to forward to your boss that will make you look like an obedient little worker bee. Please consider filling this out honestly, because we want you to benefit from the app.

### Obedient little worker bee?

This was *unexpected*. Also, Keith had definitely not gotten anything like this message when he filled it out, or he would not have recommended the app to everyone who reported to him.

What about the algorithm had identified my dissembling? How did they know that Keith was in management? I scrolled through the permissions I'd given the app without a whole lot of thought and . . . okay, I could see how Keith might have tripped a "management" flag. I was less convinced now that this was a corporate plot to squeeze productivity blood out of worker turnips, but Margo's concerns about it being a cult seemed additionally validated.

Hesitantly, I re-started that questionnaire. What were my goals? Other than not getting fired from my job because even though it's shitty, unemployment and homelessness would be shittier? Some people had "fitness goals" but it wasn't showing me those, either. Nothing about running a mile or losing weight. It was showing me goals like, read more books and learn to paint.

I used to want to learn to draw. I put that down.

## Why is my phone ringing?

I dragged myself out of bed to shut off the ringer, only to see a message: Good morning, Linnea. This is the Abelique app. Please be kind to the Abelique volunteer who is calling you.

It was an hour earlier than I had intended to get up. "Hello," I said, hoping my voice sounded sleepy and not actively hostile.

"Hi, Linnea," someone said. She sounded a little nervous. "This is your good morning call. Abelique wants to let you know that you should go start your coffee, and open your curtains while it's brewing. It's a beautiful sunny day where you are."

I could, in fact, see the gleams of light coming in around my blackout curtains. "Okay," I said. "Is that all? I don't know how this works."

The person at the other end grinned, I thought, or at least, their voice sounded fond, instead of nervous. "That's it. Just, you know, actually get up, okay? You'll be glad you did." And a click. That was the end of the call.

I sat on the edge of my bed for a minute. Then, just like she'd told me to do, I opened my curtains. The sky was blue, and the windows of my apartment were in the right direction to get morning sunshine. I started my coffee, then went to open Twitter to read while it brewed. A pop-up message appeared instead: *Don't read Twitter. Here is a link to the Abelique discussion board community for artists*.

### For artists?

Oh. Because I'd said I wanted to learn to draw. Well, okay. As I waited for my coffee to finish, I scrolled through a thread full of pictures that other people had made—some painted, some drawn. Charcoal and pastels and watercolor and pen. From the fine-line drawing of a cat in a window to the watercolor painting of a river running through a city, the art was glorious.

Another pop-up message from the app told me to drink my coffee, eat my breakfast, take a shower, and then—with forty minutes to go before I needed to leave for work—to pull out paper, and a pen or pencil, whatever I had around, and draw a picture of a dragon. I stared, exasperated, at that instruction. I had said I wanted to *learn* how to draw, not that I *knew* how to draw.

It doesn't have to be a good picture, the app added.

Grumbling to myself, I drew a very bad picture of a dragon, and then, again at the prompting of the app, took a picture of it to upload. *Bring your bus card,* the app said. *Also an umbrella and a lightweight jacket, because it's going to rain.* 

As I walked from the bus stop to my office, my phone rang again. I answered. "Hi, Linnea," said a new voice. Again: hesitant. The fact that no one else seemed to *want* to make these phone calls made the whole thing both more weird, and less weird. It was weird they were doing it. But obviously, my suspicion of phones did not make me an outlier. "This is Yasmin with a very quick call to welcome you to the community of artists."

This felt like a lot. A *community of artists?* "I think I might have made a mistake," I blurted out.

"Yes, that's why we call," she said. "Lots of people say that. You didn't make a mistake. Do you want to make cool things? Is that something you aspire to do?"

"I mean, doesn't everyone?" I said. It was starting to rain. I pulled out my umbrella.

"No, some people aren't that interested in making things, actually. But it sounds like you are."

"Yes," I said.

"Then you belong with us," she said. "We'll support you. I loved your dragon, by the way."

I flushed. "It looked like something drawn by a ten-year-old."

"How old were you when you stopped drawing for fun? Were you about ten?"

" . . . yes."

"Well, so, you haven't lost any skills. You'll get better. Welcome to the community."

It's weird how many tiny decisions you make in a day.

I started to notice this because the app was making a whole lot of them for me.

What to wear. What to make for breakfast. It presented me with a whole entire grocery list and meal plan, which made me nervous that I was going to be blithely instructed to spend twice as much at the grocery store as I usually did, but the final bill was the same as most weekly trips, so fine, I'd give the app's meal plan a try. It got me out the door early enough to take the bus instead of driving, which saved me money on parking and built a walk into my daily routine.

And drawing practice! Daily drawing practice. After a week of taking the bus instead of driving, the app sent me to an art store with another shopping list, and I came home with a fat sketchbook and a roll of pencils paid for with the exact amount I'd saved by taking the bus. It quickly had me put everything to use drawing the bouquet of flowers it had added to my grocery cart.

I could see why people liked this app. Even if it was a little unnerving that it seemed to know my grocery budget.

Instead of scrolling Twitter, now I was scrolling pictures of other people's work in the art community. Quick sketches of houseplants in the sunshine, done in charcoal or soft pencil, the shadows dark under them. A fanciful drawing of a cat-mermaid done in colored pencil. A watercolor rendition of a city street, the distant buildings fading like haze into a purple sky. I drew my daily assignment—flowers, shadows, the view from my window, another dragon—and posted them faithfully even though it felt like everyone else's work was miles better.

I'd never taken art in high school because my parents thought extra science would give me a boost when I got to college and I should think about my future. Then I never took any art in college because college costs a lot of money and I should focus on classes that would be practical. Now I was in a "good job," which meant it offered health insurance and paid enough for me to afford rent and student loan payments, and maybe if I stuck with it, someday I'd make enough to afford a house.

I liked drawing, I realized. It had been fun when I was a kid. Why had I ever given it up?

Two weeks after I started using Abelique, it added me to the phone tree: now instead of just getting calls, I also sometimes had to make them. The first time, it was a "good morning" call, and I'd have stared at the screen procrastinating except for the knowledge that I might be someone's *actual alarm clock*, so I'd better actually do this. I didn't have to punch in the numbers: Abelique did that for me, as well as activating the speakerphone feature so that I could see what the app wanted me to say. The phone rang twice, and someone picked up. "Hello," said a groggy voice at the other end.

"Hi," I said. "This is your good morning phone call." More information was scrolling up the screen. "Abelique would like you to remember that you have a dentist appointment in an hour, so don't head to work, you need to go to the dentist today."

A faint laugh. "Right. Okay. Thanks." And that was it. Over before I even *really* felt nervous. And either Abelique users were all very polite, or the app was routing me to the easier calls since I was new at this. Everyone I called with a reminder (it's time to get up, it's time to go to bed, it's time to go for a walk, have you showered today?) said thank you and usually did whatever it was. (I got a little notification so I knew my reminders had done some good.)

Thirty days in, it was time to start paying for the app, which is when I discovered the payment was not something straightforward like \$30/month. No: the app simply rounded up payments to the nearest dollar, so \$3.95 became \$4, or \$58.51 became \$59, and the app took that extra money. (On the other hand, if you were paying \$1.25 for something, it rounded that up to \$2 and sent the extra 75 cents into your own savings account.) I decided that I was getting enough value out of the app that it was worth it, and clicked the consent button.

"Isn't it great?" That was June's reaction. She was still wildly enthusiastic about Abelique. Also still playing Wordle.

"Good job. I'm glad you showed some open-mindedness about this," said my boss, and I nodded enthusiastically and pretended it was making me more productive even though I'd gotten an actual phone call the previous day at 5:10 p.m. from someone who said, "You know, your job doesn't love you back. You should go home. If you stay late again, you might not have the energy to make dinner, and your dinner tonight is supposed to be salade niçoise, which is delicious. That's not Abelique's opinion, that's mine, I had it yesterday."

"You've joined a cult," said Margo.

"I feel like a cult would have a *belief system* or something," I said. "I mean no one's told me to stop taking my antidepressants—they sent me a reminder to pick up my refill yesterday, in fact. No one's trying to get me to worship the Great Old Ones or recruit a downline."

"June recruited you!"

"No, my boss leaned on me."

"So it's a capitalist cult. Like that book about the mice. Be a good little corporate drone."

"No, here's the thing," I said. "It really, *really* isn't." Margo started to say something skeptical, but I kept going. "Today when I left for lunch, the app sent me a note saying that Keith was going to be at an off-site meeting for the rest of the afternoon so I should take a leisurely lunch and go for a walk and maybe practice drawing for fifteen minutes before getting back to my desk. It's like if Reddit Antiwork ran a productivity app."

That was the first thing that really startled Margo. She sat back and didn't say anything for a while—just sipped her iced tea and listened to June and me as we talked about a date June went on last weekend. (One domain Abelique stayed out of was romance. It was emphatically not a dating app.) "I wonder who runs it," Margo said, finally.

Neither June nor I knew.

"I'm going to find out," Margo said. "Maybe I can sell an article about it."

"I thought you said . . . "

"I know," Margo said. "But I'm curious."

Not that I wanted to beat Margo to the punch with an article or anything, but I did start to wonder who was behind Abelique. The Wikipedia article referred to them as a "pseudonymous collective" and a number of other online sources called them a *shadowy* pseudonymous collective. I found an enormous Reddit thread in which people proposed that this might be secretly run by Apple, the Scientologists, the Chinese government, the Illuminati, and the Mattress Firm corporation, although the person suggesting that last one had come up with it because a friend of theirs had been instructed to buy a new mattress, and they admitted that this was probably because this friend was using a thirty-year-old mattress that was not only bad for their back but making them wheeze from all the accumulated dust, and also they didn't buy their replacement mattress from Mattress Firm.

The weirdest thing I found out from that thread was that apparently, if you'd been keeping up with your commitments—making phone calls, doing errands as instructed—the app didn't just take your money, it would *give* you money. Someone had quit her job because the app told her to—that seemed pretty extreme and maybe actually cult-like—and the app had gone on to issue her enough money to cover necessities. "It's a mutual aid app," she said in the Reddit thread. This resulted in a bunch of other stories, from small gifts like coffee cards in a rough week to several other people who'd quit jobs, either because the app encouraged them directly or because they'd tried leaving on time (like the app always told you to do) and gotten fired—all of whom had their bills paid by the app until they could find a new job.

The weirdest thing of all I found was a separate discussion thread of the "Abelique productivity app" among a group of managers who all said it had made their employees more productive and that you should definitely offer bonuses to people who used it.

I sent Margo an email with my findings. I had to admit that she was not wrong: this was weird.

It was about a month later that Keith dropped by my desk with a worried look.

"I just got a security bulletin with some serious concerns about that app I recommended," he said. "You should probably uninstall it. Here's some information about wiping it from your phone."

"Oh?" I said. "Well, that's worrying. I'll go do that right away."

The article highlighted the privacy concerns about Abelique, which were, in fact, *valid*. The app had started out snooping through my online life but over time had instructed me to add more and more stuff—this week's new feature was that if you took a short video of your

closet, you'd get more specific outfit instructions, using all the stuff you owned but never wore because you just never thought to put it on. This feature was going to take some time to fully update, because the "feature" was in fact "other people, but good at clothes," who were going to look at your stuff and make recommendations. Anyway, when an app wants access to your literal closet—to say that's a *privacy concern* is maybe an understatement. But I very much doubted Keith was actually worried about my privacy. I was pretty sure word was getting out that this app was encouraging people not to spend their whole life at the office.

I checked the community and it wasn't just me: people's bosses had suddenly swung from "everyone should use Abelique" to "no one should be using Abelique, it's *dangerous*" in the blink of an eye.

"No worries," someone said, and passed along a bunch of options, including a whole fakeout app that was Abelique but with a different icon in case your boss insisted on checking your phone. I swapped over to an alternate icon that said it was a menstrual-cycle-tracking app, which would basically be the Keith equivalent of Kryptonite. He would *definitely* not look any closer. Then I grabbed a blank notebook and a drawing pencil, because we had a big department meeting, and one of the great things about sketching in meetings is that unless someone looks right over your shoulder, you're indistinguishable from someone who is diligently taking notes.

Keith's worries were the start of a trend.

The "security bulletin" was followed by a series of increasingly paranoid news stories. None of them had figured out who was running it, and all of them used the adjective "shadowy" because that sounds like *maybe monsters*. Several of the articles included profiles of app users, which could have been fine, but one of them picked a formerly incarcerated person who was struggling with sobriety and found the app helpful because he'd become so reliant on an imposed routine while in prison. Another picked a woman who talked about how the app helped her "tune in to the vibrations of the universe"; the third presented an awkward composite rather than an actual human being. In other words, all those articles said, this app was for *losers*.

New sign-ups screeched to a halt.

"Is anyone worried?" I asked in a thread on the artist board. "I don't want to lose this community."

"Every online community has an expiration date," someone said.

That was not reassuring! I'd hoped for someone to say that this one would stick around, in some form.

And possibly the "shadowy collective" was thinking the same thing, because it started steering me to in-person meetups of other Abelique users. We met at coffee shops and parks and swapped phone numbers so that if the app *did* go away, we could at least keep in touch. We also swapped materials: I'd tried a box of pastels but hated the way the dust got on my fingers, so I handed those off to someone who was eager to try them. Someone else asked, "Are you Linnea?" and handed me a compact travel watercolor set. "These are supposed to go to you," she said.

I laughed ruefully. The app had tried twice to get me to buy watercolors when I went back to the art store. I kept buying more colored pencils, instead. Watercolor was *scary*. "Why is the app *so determined* to get me to do watercolor?" I asked.

"You're probably looking at other people's watercolors a lot," said the person handing me the set. "Anyway, this is yours now, take it home and try it out."

I woke up the next morning, opened my blinds, started coffee, and sat down with the watercolors and the latest bouquet of flowers. Not surprisingly, all the colors ran together and left me with a mishmash, although it was kind of pretty in its own messy way. I took a picture and put it on the day's art thread. "You should check the news," said a pinned note at the top.

Overnight, the news coverage of Abelique had shifted. This time, it was because of Margo.

Abelique was run by an AI, built and run by a lab at Temple University in Philadelphia. The computer scientists at Temple had built the app and given the AI the goal of making people happier . . . and then just watched to see what happened.

Margo had gotten her answers and sold a four-part series to a national newspaper for enough money that when we arrived at the diner the day that first article dropped, she told the rest of us it was her treat.

We sat down at our table and June leaned forward. "Here's what I don't get," she said. "You can't just tell an AI to *make people happy*. They must have given it more specific instructions than that."

"Well, there's lots of research out there," Margo said. "Like, we know people are happier if they spend time outside and get enough sleep. So it started with that, but then tracked how much various interventions helped, in order to improve the app."

I adjusted the yellow scarf the app had told me to wear this morning. "I wonder if bright colors are supposed to improve mood."

"I interviewed one of the programmers," Margo said. "And I specifically asked about the wardrobe feature. Their finding so far is that it's not about color but about wearing items you think of as 'special.' Also, people who buy things and never wear them feel sort of guilty

every time they look in their closet. Being reminded to wear some of the stuff you've bought in the past makes you feel better about yourself and your purchases. Also, you're less likely to go buy more stuff."

"They've had me wear a whole lot of bright colors."

"That's because you clearly like bright colors since you've got a ton of bright stuff in your closet. I actually could have told you that, Linnea. Every time we go shopping for something, you buy stuff that's like—bright orange or yellow or red. And then you go back to wearing earth tones." June nodded along.

"Okay," I said, feeling suddenly self-conscious. "But it wasn't the AI who looked through my closet pics, it was another member of the community."

"Yeah," Margo said. "That's probably their *biggest* finding—people are happier when they have a community. Which I'd say we already knew, *honestly*, but people are always impressed when science tells them something that we already knew."

I thought about this as I ate my lunch. Of course people are happier when they have a community, but this community was overseen and structured in ways that a lot of communities aren't. We were given tasks, from the phone tree to a recent assignment I'd had to draw an octopus for someone with a small child who really liked octopodes. I don't like going to the post office, so I'd handed it off to someone on the train and they mailed it for me.

An Audacious Experiment in Human Happiness was one of the big pull-quotes from Margo's series. It was how one of the researchers had described it. The professors running the project had refused to speak to her, but she'd found a former graduate student willing to dish (and this person gave great quotes, like the "audacious experiment" one). The article kind of glossed over the ethics involved, but the former grad student emphasized that the question they always asked was, "which of two good things makes people happier" and not "can we make people unhappy." "We already know how to make people unhappy," she said. "Just look around you."

Everything Abelique had told me to do suddenly made sense. Research showed that people were happier making fewer decisions, spending time outside, driving less, and spending less time on traditional social media. So the app gave me a weekly menu, sent me for walks, told me to take the train, and pestered me to read books instead of Twitter.

Interest in Abelique surged again, but something about knowing how all of it worked took some of the magic of the site away. More importantly, though—other people started finding ways to circumvent the rules. People started joining the app to try to sell us their multi-level-marketing schemes. Food threads started attracting posts about meal-replacement drinks, and it was quickly clear that someone was getting a payout for new customers of these gross

fake shakes. One morning, my wake-up call was audio spam instead of a human voice, and that was it. I didn't remove the app, but I started ignoring my wake-up call and my go-to-bed text, which fortunately meant the app didn't try to make me do the phone tree. The less you used it, the less the app asked of you. In my free time in the evenings, I started bingewatching reality TV.

Then one afternoon I got a text. For a second I thought it was Abelique, but no: I took a closer look and I realized it was one of the people I'd met at a park, during those weeks when we thought the app was going to get shut down. One of the other artists.

Would you meet me again, the text asked. It's supposed to be nice this weekend and I miss painting.

I glanced over at my pencils, which were actually gathering dust. *Did the app put you up to this?* I texted back.

No, came the response. I just miss doing art. Don't you?

I looked at my pencils again. For the last month, looking at them had made me feel guilty, so I'd gotten into the habit of looking anywhere else. Twice, I'd almost put them away entirely. But I *did* miss drawing. I missed it a lot.

I'll meet you, I texted back.

I sharpened my pencils, and pulled the watercolor brushes out of the drawer. My sketch pads were lined up in a neat row, and I paged through each. It had been long enough since I'd looked at them that I could see the things that were good, instead of just the things that were bad. The curl of the octopus tentacle on the sketches I'd made prior to that drawing I'd sent off as a gift. The light and shadow in that sketch of my kitchen that I'd somehow gotten just right. That watercolor painting of the bouquet that had filled me with frustration now looked amazing, in its own messy, beautiful way. I gently pulled that painting out of the sketch book and put it up on the fridge so I could look at it. Why had I stopped buying myself flowers? Did I need an app to tell me to buy myself flowers?

I met up with Kristin at the park. She was younger than me. "I haven't used the app in months," I confessed.

"Me, either," she said. "I got tired of being told what to wear and what to eat."

"Let's walk around and find something we want to paint?" I said.

We walked through the park side by side, looking for something beautiful. The thing about setting out with a drawing pad and the intention to make art is that I notice so many things: the shadows cast by the tree leaves, the tiny wild violets growing in the shade, the curve of a bird's flight through the air. We made our way to a fountain with flower plantings in big pots

around the edge. There were four other people there when we arrived, with drawing pads and pencils, or little travel palettes of watercolors. Two of them looked up and smiled as we joined them. I sat down in the grass and started working.

Next to me was an older woman with a very cheap drawing pad and a pack of crayons. She caught me looking at her drawing and flushed. "I'm sorry," she said. "Is this a club? Because I'm not a member and I don't want to take anyone's spot."

"It's not a club," I said. "And if you're here to draw, you belong, anyway." I pulled out my watercolors and the travel cup of water, and handed her a sheet of paper and one of my brushes. "You know what? Let's both try something new."

Naomi Kritzer has been writing science fiction and fantasy for over twenty years. Her YA novel *Catfishing on CatNet* (based on her short story "Cat Pictures Please") won the 2020 Lodestar Award, Edgar Award, and Minnesota Book Award. Her latest book, *Chaos on CatNet*, came out from Tor Teen in April 2021. Naomi lives in St. Paul, Minnesota with her family.

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