

Happiness Factor
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Kiara has just finished the last of her calculations when her boss calls her into her office. Always a bad sign.

“You nearly screwed us all over,” Janice says. Long spider-like fingers rub weary eyes beneath black glasses. This new program has overworked them all.

Kiara squints at the paper. It’s one of her expected benefit calculations. At least, it has her stamp of approval on it. She doesn’t recognize it, but that might be because caffeine doesn’t hit until 10am and everything before that is lost in a hangover haze.

“Really Kiara?” Janice continues. “The founder of one of the largest companies in the world? I know we have reviewers but can you imagine what would happen to our pilot program if the government found out we marked the head of a shipping empire as having a negative expected benefit?”

There. A red number marking the expected benefit of the founder of a global shipping company. The expected benefit results range from negative one to one, with positive numbers closer to one indicating a higher expected contribution to society, and numbers closer to negative one indicating a low expected contribution to society. Somehow, she’s marked this man, Mr. Wellingsby, as a negative 0.323—well beyond any margin of error that would indicate a reasonable statistical error.

“I’ve no idea how you messed up your calculations so badly, but fix it by tomorrow. This is our first batch of Expected Benefit calculations for people, and I don’t want the higher-ups finding a single error.”

“Maybe he deserves a negative number,” Kiara suggests. “He doesn’t exactly have the cleanest history. Waste dumps into the ocean, questionably sourced steel, poor compensation—”

“In our test batch, not a single CEO, chairman, or cofounder had a negative expected value. Whatever factors the NSA coded into the program and whatever weights they assigned those factors, business acumen and influence are almost certainly important ones.”

Or wealth. “I still don’t believe people should be valued by a number,” Kiara says.

Janice looks pained as she twirls a miniature wood carving of a totem pole between her fingers. “But the higher-ups want a system that does.” She plants the totem pole on the desk. “This is our test batch. Who knows? Maybe the government will realize this doesn’t work, and then we won’t have to do it. I can’t say I like the idea of redlining people any more than you do.”

“We said the same things about jobs.” Five years ago, a brilliant young mathematician from Nepal first came up with the formulas to determine the expected benefit of occupations. Actuarial companies throughout the United States were quick to adapt this, and soon, the risk management company Kiara worked at for five years became a government contractor that calculates the expected benefit of occupations.

She still remembers her first negative calculation. She received an assignment to determine the expected benefit of fly fishing. An odd one, and not a profession she’s ever thought much about, but it was still strange to see the results. Once she determined fly fishing to have a negative expected benefit, the government released a list of occupations with negative expected benefits to the public. Those occupations became stigmatized due to social pressure and the threat of being blacklisted if other companies discovered you once pursued such a job. She effectively killed off the industry of fly fishing.

“This system may stick,” Janice says. “But even so, don’t worry so much. From our test batch, only four percent of people had a negative expected benefit, and most were due to prior criminal history. As long as you don’t commit any crimes, you should be fine.”

And who is most likely to commit crimes, wonders Kiara. Not the billionaires like Mr. Wellingsby who don't have to worry about where their next meal is coming from. No, it is the ones who have been beaten down by the system. The ones who must fight to survive.

Kiara sips on a coffee as she peruses the calculation sheet Janice gave her. It's 10pm, and she told herself she wouldn't work on this until tomorrow morning, but the problem has been irking her ever since the man appeared on the news.

She was eating dinner in front of the TV with her fiance Daniel when he flicked to a news channel.

“Hey, wait—that's the guy I was talking about.”

Daniel twirled the remote on the back of his hand. An old trick he learned with mics back when he was the lead singer for an underground indie rock band. That's another job which was destroyed by the government's blacklist. Apparently, musical occupations don't provide a positive expected benefit when you're only singing to a couple hundred people. “Ernest Wellingsby? Founder of the number one leader of global shipping in Logistics Corp?”

Kiara squeezed his hand affectionately. “So you do listen to me.”

“Nope. Says it right on the bottom of the screen.” He dodged her punch without even looking. Her hand tangled in his long black hair, a final remnant of his rockstar days. “Caught in another scandal. Apparently, the iron for his ships is sourced from factories using child labor. Also, his workers' strike failed and they've all been replaced by scabs.”

Kiara frowned. It was looking like his negative expected benefit was making a lot more sense, no matter what Janice said about billionaire founders of large companies being guaranteed

to have positive expected benefits. Then again, it's possible the expected benefit calculations don't take into account social responsibility at all.

Now, Kiara leaps off the couch, paper gripped in her hand. There! A single line of black text hidden amidst the document: "Happiness Factor." Two words that have no business being there.

She opens her laptop atop the coffee table. She needs to see the code. Maybe Janice is wrong, and polluting, union-busting, child labor using Mr. Wellingsby really does have a negative expected benefit value assigned to him. She could certainly believe his workers would be better off without him.

"You're not watching the movie," Daniel says from behind her. Her impression lies beside him on the couch.

She boots up the start screen.

"I'll stop bothering you if you tell me who just got bitten by a zombie."

"The tall woman with blonde hair."

"You're right! Emma Thompson does become a zombie in *Love Actually*."

Kiara offers a rueful smile. "Sorry. This has been bothering me all night, but I'm close to something. I wish I could tell you but—"

"—it's confidential. Don't worry I get it. Not everyone likes watching Alan Rickman turn into a werewolf."

Daniel's always been understanding. Has to be to go from two beach houses in the Bahamas to marrying a girl who's idea of luxury was buying popcorn after sneaking into a movie theater. She'll make it up to him somehow.

Kiara logs in, opens the code editor. But when she tries to open the shared file, it's locked. "What?" She tries to open it in plaintext, but that fails too. She knows she had access to it earlier. Someone must have revoked her access or altered the file in some way.

Who could it be? They have a small team working on this specific batch. It's just her, Alex from the NSA's coding team, Lacy from review, and Janice as supervisor. Is it possible one of them changed something in the code that made this "Happiness Factor" pop up?

Behind her, Daniel says, "Wow! It turns out Alan Rickman's been a real boy all along!"

Kiara closes the laptop. She'll have to ask Janice to check her access when she goes into work tomorrow. A problem for later then, she thinks, as she snuggles in next to Daniel. He wraps an arm around her and pulls her in close.

Thousands of lines of code sprawl before her like ziggurat steps leading up to the gods. She shudders. Or leading down to sacrificial mortals, if this is just the surface-level stuff cleared for her level. The confidential back-end programming must be thousands of lines more.

Janice was more than happy to reset her access to the code when Kiara spoke to her earlier this morning. Lacy confirmed she still had access. Alex called in sick, but he messaged that he still had access too.

She spends nearly half an hour scrolling through the code aimlessly. Then, the coffee kicks in and she ctrl + F's "Happiness Factor" and finds what she's looking for immediately.

There, a line of code. It looks like it was once commented out—she can see the battlefield of hashtags and tildas—but something messed with the comment symbols and it turned into actual code.

It is two lines. The first is long. The second is short:

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print("Happiness Factor")
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That would explain the output on her page.

Kiara frowns at the long line above. It is a complicated bit of code, thousands of characters long. It seems to be pulling an unused factor from the database.

She quickly ctrl + F's "factors" and compiles a list of factors used to calculate expected benefit. There's age, net worth, social contribution, occupation, dependents, criminal history, marital status, disability... The list goes on; what she needs is a way to find the most important factors. Any factor that can override net worth must have an extremely high importance. What she needs are the weights for each factor. The weights will reveal which factors are most important in determining the expected benefit a person will provide in their life.

After a few minutes of searching and sorting, she compiles a list.

Surprisingly, the highest weighted factors are net worth, health, and occupation. She would have expected criminal history to be highest, based on her earlier conversation with Janice, but it has only a weight of 1.79 compared to net worth's weight of 2.7. Social contribution also barely scratches the list, her having to scroll past dozens of factors to find its weight at 1.19.

But why is occupation so highly weighted at 2.15? Isn't the whole point of their past expected benefit calculations of occupations supposed to eliminate those kinds of jobs already?

She shakes her head. She's getting distracted. She scans the top factors, but finds none that would seem to have the potential to give Mr. Wellingsby a negative expected benefit. In fact, based on this weighting, even if he was dumping radioactive waste next to orphanages, his net worth factor would completely override any potential negative social contribution score.

She studies the single line of code again. Realization strikes her like a bolt of lightning. It's not pulling a preexisting factor. It's creating a new one. A Happiness Factor.

The door to her office bangs open. She startles, but it's just Lacy.

"Another bad one," says Lacy as she chews on some mint gum. "This one's got an expected benefit of 0.91."

"Very high," Kiara says. Could Lacy be the one altering the code? But for what purpose?

"Especially cause he's spent most his life in a hospital."

Kiara accepts the sheet from Lacy. Rian Minamoto. A 10-year old boy with severe cystic fibrosis. Something about him seems vaguely familiar, but the memory fades with the aroma of Lacy's minty breath. What is familiar though, is that lone black line amidst the text: "Happiness Factor."

"Whatcha working on?" asks Lacy, peering at her laptop.

"Nothing important." She closes the screen. She's not sure why, but she doesn't want Lacy knowing what she's discovered so far.

Once Lacy is gone, Kiara opens her laptop again. She runs Rian's profile through the program. Expected Benefit of 0.91. Kiara then comments out the 'happiness factor' line of code and runs it again. Expected Benefit of -0.59.

So someone on their team added a new factor to alter the final calculation. They must've known they would be caught though. Why else so blatantly print "Happiness Factor" onto the sheet?

Janice loves her job too much and believes in the cause. Lacy's only here for her paycheck and she doesn't have a strong coding background as far as Kiara knows. That leaves Alex.

She tries to remember what she knows about Alex. He has two kids in elementary school, and she remembers hearing something about his wife... She also remembers that he's called in sick a few times because one of his kids is in and out of the hospital a lot.

Just like Rian Minamoto. Wait, is Alex's last name Minamoto? No, it's not. But a quick search reveals a wedding photo. Alex, loving stepfather to his two stepchildren Rian and Sara.

The door bangs open again, rattling the glass. This time it's two official-looking agents in black suits, and they don't look happy.

The interrogation is long. Five hours of sitting in a room, answering questions about herself, her political opinions, her background, and most importantly, about Alex and his work. She tells them what she knows, which is not much at all. Yes, she found the Happiness Factor hidden within the code. No, she hasn't noticed any other odd errors. Yes, she realizes this is a matter of national security and would certainly tell them if she knew anything useful because she most definitely does not want to be arrested for aiding an enemy of the state.

In the end, they release her with promises to monitor her future work and communications. She agrees because what choice does she have?

When she finally returns to the office to collect her belongings, it is late at night. She collapses on the couch. Work tomorrow is going to be crazy and exhausting. Apparently, they're going to need to review all their current calculations, as well as scrap and review every single piece of code Alex has ever touched.

As she stretches out, she hears something crinkle beneath her. She rummages in the crack between cushions and pulls out a piece of paper. It's her initial expected benefit sheet for Mr. Wellingsby. This is probably the kind of evidence she should turn in to the NSA.

She's about to drop it when she spots something odd. There's a double-border at the bottom of the page. Before, she thought the border had gone fuzzy, but as she peers closer, she sees that they are tiny letters squished together. Zooming in, she types out the letters onto her phone.

It's a link. From an enemy of the state. But what has Alex really done? To her, it seems he simply added one factor that he thought was missing. Something that took into account an alternate view of what's important.

She enters the link into her browser and begins reading.

—Then we came for the hospitals, but not the hospitals with world famous brain surgeons on ten million dollar retainers, operating hundred million dollar robot pincers to pick the brains of people worth a billion dollars. No, we came for the St. Jude's cancer hospitals and hospitals providing hip replacements for the elderly, palliative care for babies, and prosthetics and psychological care for veterans.

Rule 51 of Expected Benefit: Survival of the Margins. Any energy wasted on the sick is better spent improving society for the healthy. Exceptions are provided for the sick so long as they are wealthy, since their money can be used to fund improvements for other areas of society.

True utilitarianism. John Stuart Mill would be so proud.

Her brain whirls. She scrolls up to the top. A view count displays in the top right corner. It holds steady at two. She reads from the beginning.

Who am I? A father of two and a husband to one. My wife had cancer, my son is chronically ill, and my daughter wants to be an animator. I have worked within the Expected Benefit unit of the government since its inception. I have eliminated painters, ASL teachers, independent journalists, anthropologists, and archaeologists as professions, and have watched

livelihoods destroyed by my calculations. I did this because I believed in the numbers. In the logic.

Now, I can no longer do so. The Expected Benefit unit has shifted focus. Rather than assigning value to occupations, we now assign value to people. But I have seen these calculations, and their results, and they do not do what they proclaim.

According to these calculations, my wife, son, and daughter would all be placed within the redzones where people with negative expected benefit will be forcibly relocated. Why? My wife, because she was sick with an illness with a high mortality rate. My son, because he consumes too much time and resources to be kept alive. My daughter, because she wants to provide beauty in the world rather than something more practical.

This use of factors disguises the true intentions of this program: the elimination of artists, historians, teachers, the disabled, the sick, the elderly, the poor, the oppressed. It is eugenics under another name. All because some number decides they are better off isolated or dead. But how can numbers determine the happiness someone can provide? Where is the happiness factor?

The next morning, Kiara stands in Janice's office, her belongings packed in a plastic box. Daniel is waiting outside, ready to help load her stuff into his car.

"We'll miss you," Janice says. "With Alex now imprisoned where he belongs, and you abandoning us, only Lacy and I are left to carry this project. The both of you have put me in a bad spot."

Kiara shrugs. "I decided I needed to reevaluate certain factors in my life."

Janice toys with the totem pole with her long fingers. “It’s a shame they couldn’t stop his manifesto from getting leaked. They’re certain they quarantined every single one of his network communications, but somehow it got out. It’s nearing one million views.”

“Someone else must have read it and decided it was worth sharing.” Kiara meets Janice’s gaze. “You don’t have to do this project, you know. Making a program to calculate the expected benefit of people might be good in theory, but the reality is that it’s never going to be objective. Someone’s always deciding what factors are most important.”

“Someone like Alex.”

A series of honks sounds outside in the tune of Ride of the Valkyrie. Her fiance being lovably annoying as usual.

Janice tosses the totem pole on the table. “That’s why we need people like us. To make sure people like that don’t take matters into their own hands.”

Kiara walks up and stands the totem pole upright. “You know they’re planning on putting all these ‘negative expected benefit’ people in guarded counties in Utah, Arkansas, Arizona, Nebraska, and Maine? It’s the Trail of Tears all over again. Japanese Internment Camps from World War II.”

“They won’t be guarded,” Janice says. “Just gathered in places where their expected benefits match their surroundings.”

“Yes, Janice. Because the less fortunate always keep their place.”

Conclusion to the *Happiness Factor Pledge*:

I've seen the factors they use. We're cultivating a society that kills art, hordes resources, and discourages community. A society built around selfishness. Built on the backs of the unfortunate.

But we won't let them. Join together. Fight these rules. Fight with all the art and history they tried to take from us. Fight for a better world that uplifts those beneath us, not because they could be us, but because we all deserve a chance at happiness.

Happiness has always been the greatest factor.