Intellect

Undercover Economist

OLIVER ROEDER

Algorithms don't always hit the back of the net

A few weeks ago, I was invited to join my newsroom's Fantasy

Premier League. As an eager new American staffer at a British newspaper, of course I accepted the chance to join in assembling an imaginary team of real-life players and scoring points based on their actual statistical performance. One doesn't want to be rude, after all. That's when the problems started, chief among them that I had no idea whom to select for my team. I enjoy football as an aesthetic experience but not so much as an analytical one; I'm no great student of formations, form, the transfer market, injury reports or management politics. So I searched for the shortcut that any clueless empiricist with a laptop would these days: machine learning.

On GitHub, I discovered the code developed by some real-deal programmers for a system called AIrsenal and stole it, er, implemented it on my machine. AIrsenal uses a "Bayesian approach", estimates a "conditional distribution", leverages "Monte Carlo integration" and uses more than a couple of Greek letters in its underpinning maths. Select, copy, paste, enter. A curtain of blocky green numbers geysered up my black terminal window, simulating fixtures yet to be played, goals yet to be scored, victories yet to be celebrated.

Thus artificial intelligence assembled my fantasy team; all I did was obey its instructions. This was deeply current and a bit ▶

■ weird, not just fantasy football but artificial fantasy football. Nevertheless, I was and remain thoroughly proud of "my' creation; it had geysered on to my screen, after all. In honour of some other influential newcomers to the (real) Premier League, my team is called American Billionaire (AB). I have no plans to disobey the computer's recommendations in the months ahead.

The FPL rules, quickly: you get £100mn to assemble a fantasy squad of 15 real-life players. As they play in real-life games, you earn points from a menu based on their performance (eg. midfielder's goal = 5, keeper's clean sheet = 4). Each week, you can buy and sell players, whose prices fluctuate based on their popularity. Nearly nine million people are currently playing.

"Computers are useless," Picasso once said. "They can only give you answers." Pablo's right enough, but the answers - my fantasy roster, the result of cold, mathematical optimisation - suggested the questions. Who are these human footballers the computer had divined in its fury of calculus? I had to know. Rather than divorce me from the humanity of the sport, the AI drew me closer.

hen Newcastle's Bruno Guimarães appeared in my squad, the output of an invisible algorithm, I learnt everything I could about the real man. He's the son of a Brazilian taxi driver and wears his father's cab number, 39, on his shirt. Chelsea's

Reece James, who is right-back for American Billionaire, dreamt of playing for the club (Chelsea, not AB) as a small child kicking a ball all night in the local park. And Manchester United's Anthony Elanga, AB's reserve midfielder, is fluent in French and Swedish, and aspires to learn Spanish and Portuguese.

There is a democratising power of technology. It has the ability to improve the quality of human knowledge and to accelerate its dissemination. This power plunges us faster and deeper into pursuits, where we can all mine the rich veins at their core. But all the while, I could imagine murmurs and objections rippling through the newsroom: he's cheating!

I spoke with AIrsenal's developers, Nick Barlow and Jack Roberts, former particle physicists and now researchers at the Alan Turing Institute in London. Like most good ideas, AIrsenal started, about four years ago, as a conversation on a train.

"The problem is not in the complexity in the game, it's in getting the information in," Barlow said. "Read newspapers and you know that this player is arguing with the manager or about to be sold to Barcelona. Our algorithm doesn't know anything like this." Roberts added: "It's much more difficult to represent the state of the FPL world than a chess or go board."

Nevertheless, AIrsenal (opinions on pronunciation differ) has had its oracular moments. "We have our own move 37," Barlow said, referencing the unthinkably beautiful go move by the AlphaGo AI in 2016. "It picked Joe Hart when he moved to Burnley." It also eschewed Liverpool's Mohamed Salah when he returned from the Africa Cup of Nations last year - an unpopular but wise move, it turned out. "Maybe it was AIrsenal's lack of emotion," Roberts said.

I also inquired about the ethics of my decision and was pleasantly relieved. It takes a certain level of expertise just to run the code, they said (select, copy, paste, enter) and my approach is just a different way of achieving what I could have gleaned by, say, reading gossip about David Moyes on Twitter. "The more, the merrier," Barlow said. "I, for one, welcome our robot overlords."

Alrsenal finished 976,423rd last season, solidly in the top 10 per cent. If they ever do win the top prize, the Alan Turing Institute's ethics board has decreed that their creators give it to charity, and that's just fine with them. I plan to do the same.

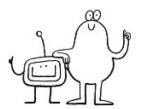
As I write, AB sit third from bottom, in the relegation zone.

Oliver Roeder is the FT's US senior data journalist and author of "Seven Games: A Human History" (WW Norton). Tim Harford is away

Notes from the Cutting Edge

CRISTINA CRIDDLE

Neighbourhood apps versus neighbourhoods IRL



I was surrounded by boxes in my new living room, trying to reassemble my furniture, when I heard a knock at the door. Assuming it was a delivery, I stumbled downstairs, sweating in unstylish cycling shorts and Crocs. At the door were my new neighbours, brandishing a snake plant and a smile.

This act of kindness stunned me and sparked a discussion with friends over the etiquette when you move into a new place. Should I return the favour with a gift? One friend had bought a crate of prosecco and delivered bottles door to door on their new street. Another painted watercolour cards to post through letterboxes. But most of us were in agreement: introducing yourself online is fine, unless you happen to bump into someone on the street.

I drafted a fun but informative message introducing myself,

Forum conversations

inevitably descend into

lost cat appeals, stolen

about the council

parcels and complaints

accompanied by a suitably fluffy photo of my cat, posting it on the street's Facebook group. It was met instantly with likes and comments.

In recent years, interactions with our neighbours have increasingly moved online, to forums on WhatsApp, Facebook or Nextdoor, an app that connects users by location. Covid-19 lockdowns supercharged the trend; at the peak of the pandemic, usage of Nextdoor increased 80 per cent globally. "For a lot of people, knocking on doors is a daunting thing," says Lindsey Brummitt, programme director of Eden Project Communities, which organises social events around the UK. "Online platforms have encouraged people to take that first step."

While these forums can be useful for recommendations on cleaners and cafés, conversations inevitably descend into lost cat appeals, stolen parcels and complaints about the council. The @bestofnextdoor Twitter account has amassed more than half a million followers by sharing screenshots of the app's most

hilarious posts. One titled "Older Model Car Parked On Local Street" reads, "We pay a lot of money to live in this neighbourhood. It's outrageous that we should have to look at cars with such a low [book] value."

Nextdoor's stock symbol is KIND. But, as is so often the case with social media, unkindness can proliferate. Some users shame individuals for their behaviour, often using doorbell camera footage. (The company says harmful or hurtful content amounts to less than 1.5 per cent of views.)

Solely online interactions surely miss something important. At my old flat, I made my first IRL (in real life) neighbour friend during the pandemic when I passed her some excess cinnamon buns over the balcony after a baking frenzy. She'd just turned 60, more than double my age, and was isolating due to health conditions. We spent long nights

putting the world to rights, without much in common apart from a need for companionship and a love of gossip.

Sarah Friar, chief executive of Nextdoor, is keen to

encourage app users to interact in person as well as online. "You will see us always push on 'in real life' events, because we think that's a core differentiator from other social media platforms," she says.

Now that we can leave our homes and see friends and family further afield again, those physically closest to us might be neglected. About 41 per cent of adults in the UK say they have been lonelier since lockdown. according to a Red Cross report.

Neighbours operate on an unspoken understanding: they open their doors if you're locked out, watch your car for scratches as somebody tries to parallel park and collect your parcels if you're not in. Perhaps I'll be gifting a potted plant as thanks before too long.

Cristina Criddle is a technology reporter for the FT