

Web Development Session-4



Web 1 - Static Web

- Read only



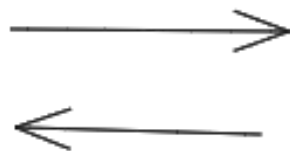
Web 2: Social Web

- Read-Write





Client





Server

Putin set for victory amid rigging claims

Vladimir Putin emerges from a polling booth in Moscow yesterday as Russia voted in presidential elections. According to an exit poll published by the Public Opinion Research Center, Mr Putin won — as expected — with 77.9 per cent of the vote. The Central Election Commission said turnout was about 60 per cent by 19.00.

However, there were thousands of complaints of irregularities in the voting process, such as ballot stuffing. Kremlin officials set a target of 70 per cent of the vote for Mr Putin on 70 per cent turnout, opening presidential governors to whip-up support. In Moscow, road stalls at polling stations offered free tea and officials prevented badge and placard carriers from entering.

Reports & Analysis page 6

Facebook feels the pressure over claims its data helped Trump win

affected

...which were used without consent, the data analytics were years after it had been ruled, in 2018, violating the law to "lie Facebook the network selling fake news, Marco Rubio said, responses grew so they're above the threshold."

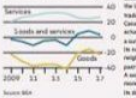
Facebook data was "used in the 2016 Trump-Pence election," said the Washington Post.

Source: NBC

Dataset

Northern comfort

US trade balance with Canada (2018)



Source: US Trade Representative

SPORTS FINAL

NEW YORK'S HOMETOWN NEWS

ANTI-TRUST

Facebook CEO Mark Zuckerberg

I'm gonna get you



Briefing

- **Morise in £200 pension pledge to GKN** The treasurer pledged to step up to battle to win support for its health £200 cash and shares bid for the engineering company, with a pledge to pump £200 into the pension fund. — [Page 1](#)
- **Davis to hold Brussels transition talks** Britain's chief Brexit negotiator will hold talks in Brussels today to try to secure the deal transition that demands by Brussels, amid fears of a last minute move over the Irish border. — [Page 1](#)
- **Wier scheme to axe LTP pay schemes** The engineering company will review the push to reform executive pay with a plan this week to ditch the reward scheme that has been linked to executive leadership remuneration. — [Page 1](#)
- **Johnson steps up Russia poison claims** The foreign secretary has said the UK will stop any questions on Vladimir Putin's activities, as he claimed Russia had stockpiled nerve agents "in the last 10 years". — [Page 1](#)
- **More work on compliance at Barclays** The bank's board has declared there is still more work to do to improve controls and compliance, as it called on senior managers to try harder to hold individuals to account when they fall short. — [Page 1](#)
- **Beijing names new central bank chief** China's parliament is to name Yu Kaiming, an economist, to replace the current chief, ensuring policy continuity as Beijing moves aggressively to control risk in its financial system. — [Page 1](#)
- **Fed policymakers to weigh rate moves** A new poll outlined in reports from the Federal Reserve this week as policymakers discuss lifting interest rates further than had been previously expected. — [Page 1](#)

The Guardian

Pressure grows on Facebook and data firm over mass breach of personal files

G2

Facebook and data firm Cambridge Analytica face mounting pressure over a mass breach of personal files.

Facebook and data firm Cambridge Analytica face mounting pressure over a mass breach of personal files. The company's data was used to target voters in the 2016 US presidential campaign.

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Data watchdog opens investigation into Google

Simon Carswell
Public Affairs Editor

Elon Musk of the sea floats electric boats

Page 7

Alphabet to shut Google+ after user data expose

Google will shut down the consumer version of its social network Google+ after announcing data from up to 500,000 users may have been exposed to external developers by a bug that was present for more than two years in its systems.

The company said in a blog on Monday it had discovered and patched the leak in March of this year and had no evidence of misuse of user data or that any developer

Interfaces (API) partly due to fears of regulatory scrutiny, citing unnamed sources and internal documents.

Google said it had reviewed the issue, looking at the type of data involved, whether it could accurately identify the users to inform, whether there was any evidence of misuse, and whether there were any actions a developer or user could take.

"None of these thresholds were met in this instance," it said. "We found no evidence that



Google CEO Sundar Pichai was briefed on the plan not to notify users about the breach after an internal committee had reached that decision

memo, prepared by Google's legal and policy staff and shared with senior executives, warned that disclosing the incident would likely trigger "immediate regulatory interest" and invite comparisons to Facebook's leak of user information to data firm Cambridge Analytica.

Allegations of the improper use of data for 87 million Facebook users by Cambridge Analytica, which was hired by President Trump's

Web3: The new internet?

The term "Web3" was coined in 2014 by Ethereum co-founder Gavin Wood

- Read Write Own
- **Blockchain** technology - provides decentralization



DApps: What Web 3.0 Looks Like

As we move into the future, we find increasing need for a zero-trust interaction system. Even pre-Snowden, we had realised that entrusting our information to arbitrary entities on the internet was fraught with danger. However, post-Snowden the argument plainly falls in the hand of those who believe that large organisations and governments routinely attempt to stretch and overstep their authority. Thus we realise that entrusting our information to organisations in general is a fundamentally broken model. The chance of an organisation not meddling with our data is merely the effort required minus their expected gain. Given they tend to have an income model that requires they know as much about people as possible the realist will realise that the potential for convert misuse is difficult to overestimate.

The protocols and technologies on the Web, and even at large the Internet, served as a great technology preview. The workhorses of SMTP, FTP, HTTPS, PHP, HTML, Javascript each helped contribute to the sort of rich cloud-based applications we see today such as Google's Drive, Facebook and Twitter, not to mention the countless other applications ranging through games, shopping, banking and dating. However, going into the future, much of these protocols and technologies will have to be re-engineered according to our new understandings of the interaction between society and technology.

Web 3.0, or as might be termed the "post-Snowden" web, is a reimagining of the sorts of things that we already use the Web for, but with a fundamentally different model for the interactions between parties. Information that we assume to be public, we publish. Information that we assume to be agreed, we place on a consensus-ledger. Information that we assume to be private, we keep secret and never reveal. Communication always takes place over encrypted channels and only with pseudonymous identities as endpoints; never with anything traceable (such as IP addresses). In short, we engineer the system to mathematically enforce our prior assumptions, since no government or organisation can reasonably be trusted.

There are four components to the post-Snowden Web: static content publication, dynamic messages, trustless transactions and an integrated user-interface.

The first, we already have much of: a decentralised, encrypted information publication system. All this does is take a short intrinsic address of some information (a hash, if we're being technical) and return, after some time, the information itself. New information can be submitted to it. Once downloaded, we can be guaranteed it's the right information since the address is intrinsic to it. This static publication system accounts for much of HTTPS's job and all that of FTP. There are already many implementations of this technology, but the easiest to cite is that of Bit Torrent. Every time you click on a magnet link of Bit Torrent, all you're really doing is telling your client to download the data whose intrinsic address (hash) is equal to it.

In Web 3.0, this portion of the technology is used to publish and download any (potentially large) static portion of information that we are happy to share. We are able, just as with Bit Torrent, to incentivise others to maintain and share this information, however combined with other portions of Web 3.0, we can make this more efficient and precise. Because an incentivisation framework is intrinsic to the protocol, we become (at this level, anyway) DDoS-proof by design. How's that for a bonus?

The second portion of Web 3.0 is an identity-based pseudonymous low-level messaging system. This is used for communicating between people on the network. It uses strong-cryptography in order to make a number of guarantees about the messages; they can be encrypted with an identity's public key in order to guarantee only that identity can decode it. They can be signed by the sender's private key to guarantee that it does indeed come from the sender and provide the receiver with a secure receipt of communication. A shared secret can provide the opportunity to communicate securely, including between groups, without the necessity of proof of receipt.

Since each of these provide ultimate message logistics, the use of transmission-protocol level addresses becomes needless; addresses, where once user or port together with IP address, now become merely a hash.

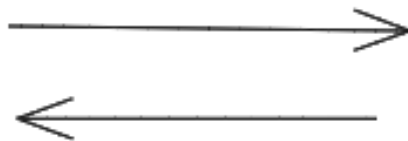
Messages would have a time-to-live, allowing the disambiguation between publication messages that one may wish to be 'alive' for as long as possible to guarantee as many identities see it and instant signalling messages that wish to be transmitted as quickly as possible across the network. Thus the dichotomy of latency and longevity is traded.

Actual physical routing would be carried out through an game-theoretic adaptive network system. Each peer attempts to maximise their value to other peers in the assertion that the other peers are valuable to them for the incoming information. A peer whose information is not valuable would be disconnected and their slot taken with a connection to some other, perhaps unknown (or perhaps second-degree) peer. In order that a peer be more useful, messages with some specific attributes would be requested (e.g. of a sender address or topic—both unencrypted—beginning with a particular bit string).

<https://gavwood.com/dappsw3.html>



Client



Blockchain

Web3 Applications

- **Brave Browser** - Privacy focussed web browser
- **Odysee** - Video Streaming platform
- **Minds** - Social media network
- **Uplandme** - Gaming platform
- **Mastodon** - Open source social network



WHAT

ARE WE

LEARNING

HERE ?

Stage-01

Web Page Development : HTML

Styling :CSS & tailwind

Interactive: JS



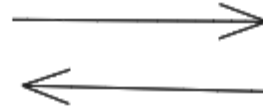
Client

Stage-02

Back-end : Node JS , Express

Testing : Postman

Database : MongoDB



Back_end

Stage-03

Front-end : React

Styling : Tailwind



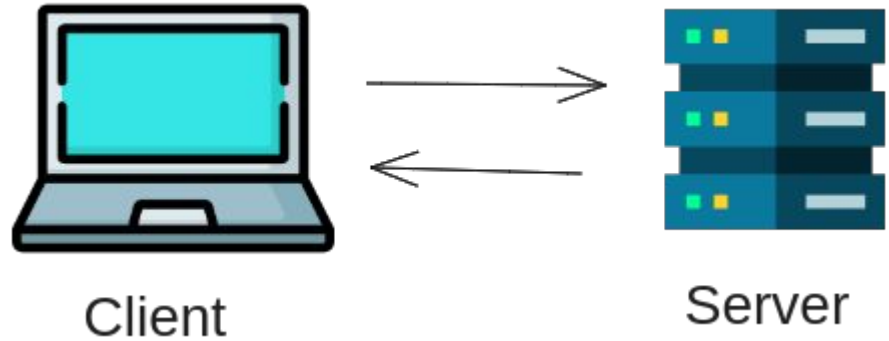
Client

Stage-04

Front-end : React

Back-end : Node JS , Express

Database : MongoDB



Stage-05

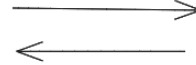
Front-end : React

Back-end : Node JS , Express

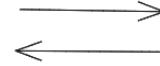
Blockchain : Ethereum &
Hyperledger



Client



Server



Blockchain



JOBS
AWAITING

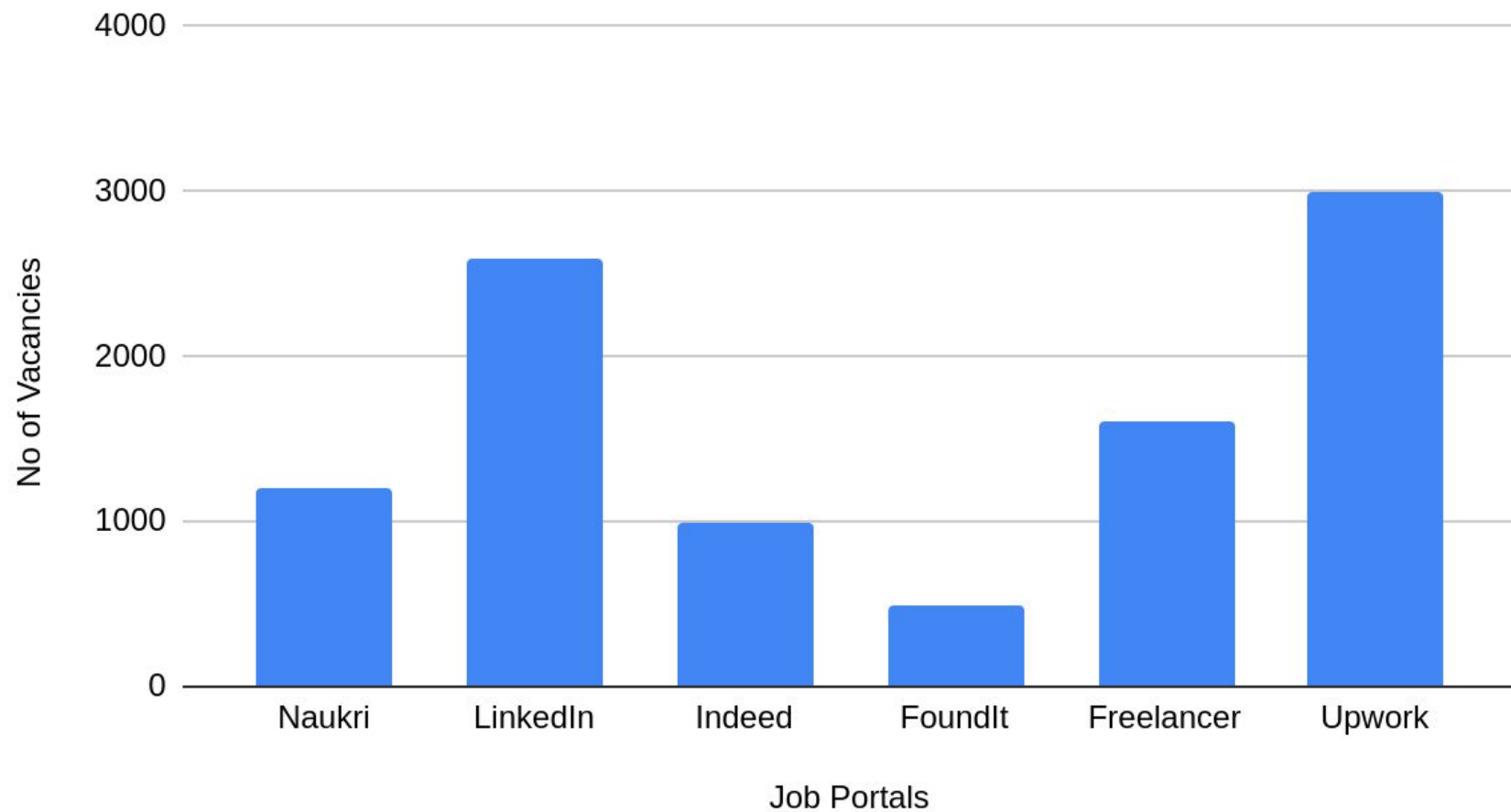
Web2 Jobs

- Web Developer
- Front-end developer
- UI Developer
- React Developer
- Back-end Developer
- NodeJs Developer
- MERN Developer
- Full-Stack Developer
- Web Developer Intern
- Web Developer Trainee
- Technical Content Writing
- Teaching/ Training

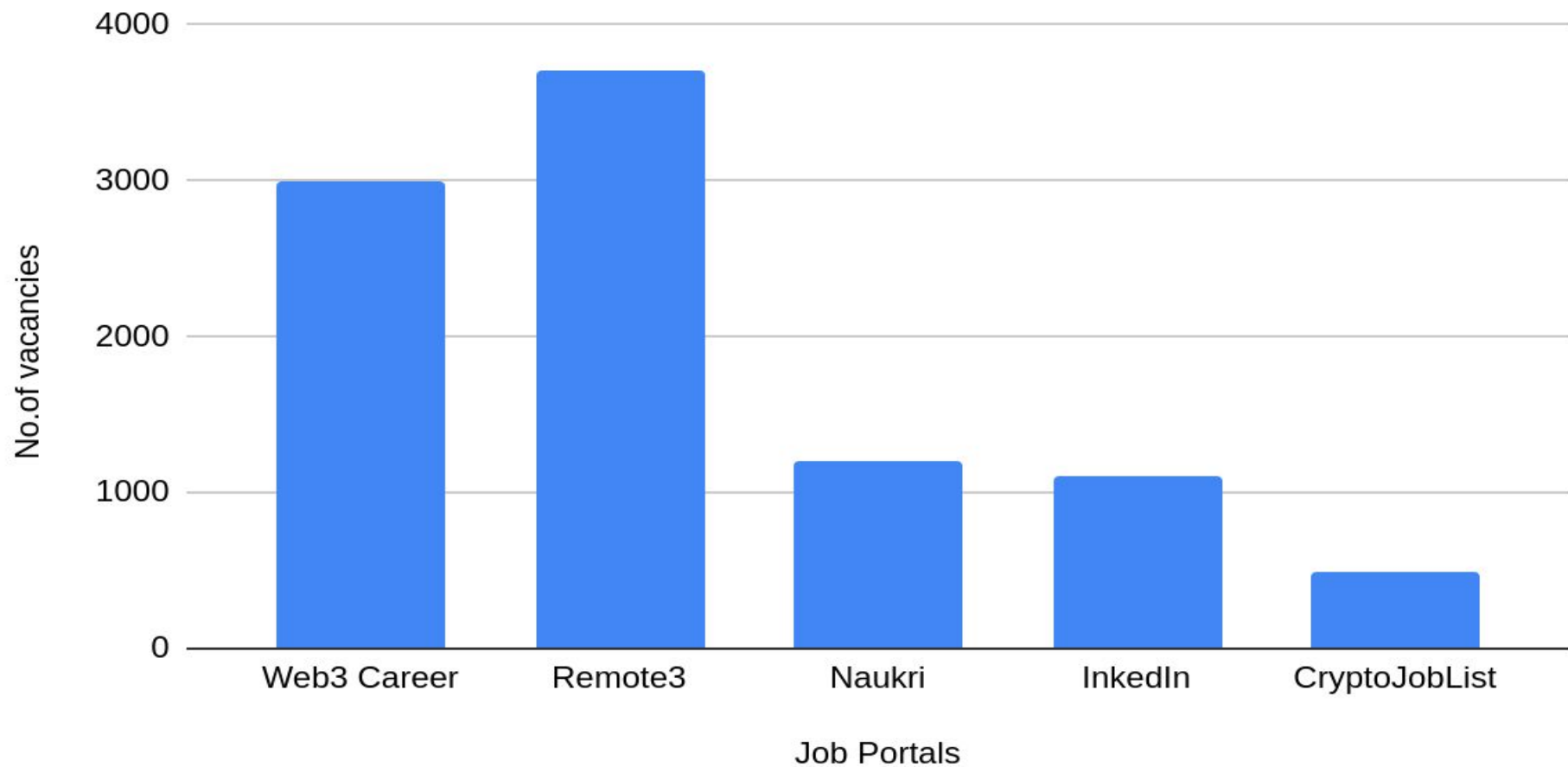
Web3 Jobs

- Blockchain Developer
- Web3 Engineer
- Research Engineer
- Blockchain Intern
- Blockchain Architect
- Blockchain Consultant
- Blockchain Engineer
- Ethereum Developer
- Solidity Contract Developer
- Hyperledger Fabric developer
- Blockchain Trainer
- Blockchain Content Writer
- Blockchain Trainee
- Private Blockchain Developer

Web2 Jobs



Web3 Jobs







- **W3Schools**
- **MDN Web Docs**
- **GeeksforGeeks**
- **DevDocs**
- **Medium**



- **Simplilearn**
- **Traversy Media**
- **freeCodeCamp.org**
- **Net Ninja**
- **Telusko**
- **Brototype**



<https://digitrendz.blog/tech-news/5166/bard-rebrands-as-gemini/>
<https://nazhimkalam.medium.com/github-copilot-695122622831>