

About

An individual contributor with experience leading the design & implementation of technical features. I advocate for quality, testing & user experience. Understanding & simplifying complex systems is a key part of what drives me.

Work Experience

Aug 2018 – **Backend Engineer**, MONZO BANK, London.

Present Writing microservices in Go to implement innovative new features and to protect Monzo's 4 million customers from financial crime.

- **Designed and implemented decision systems** for automating defunds to blocked customers' account. Defunds are critical piece of infrastructure subject to complex regulation; correctness and robustness is essential. I wrote **extensive unit tests and acceptance tests** for validating correctness and to make future refactors easier. Nearly 50% of all fincrime defunds were automated, which saved hundreds of hours per week in operational work. To date, this system has moved over 2 million pounds.
- Implemented asynchronous **multi party authorisation** for manual account defunds, simplifying the operational work for our internal staff while ensuring that safety critical operations are secure.
- Built an **improved user experience** for customers whose accounts are temporarily blocked as well as those who would be off-boarded from Monzo.
- Built **core banking features** like financial account summary and payee accounts.
- Owned integration of energy switching, contents insurance and a remortgaging service within the Monzo app. This involved **collaborating with external partners** on designing the product, defining API specifications and writing documentation. Since its launch in 2019, energy switching has generated a revenue of over £500,000.
- Wrote clear **technical proposals** for all the projects I worked on, added monitoring and alerts for key services and participated in specialist on-call rotation.

Dec 2017 – **Outreachy Intern**, LINUX KERNEL, Remote.

Mar 2018 Wrote a library using python and coccinelle scripts, to improve attribute documentation for the Linux Kernel. This library - abi2doc is available on PyPI and the code is on GitHub.

- Added documentation for **312** sysfs attributes, and wrote an extended description of the project on my blog.
- Link to list of patches submitted to the Linux Kernel.

July 2015 – **Software Development Engineer**, FLIPKART, Bengaluru.

Nov 2017 Flipkart is one of the largest e-commerce companies in India, with 10 million monthly active users. I primarily worked in the supply chain division of Flipkart.

- Highlights have been building a user interface in ReactJS for use in transportation hubs and writing a new sortation service in Java for use in shipment sortation hubs.
- I also worked for 6 months with the Merchandisation & Monetisation team, on-boarding new widgets on the landing & category pages.

Education

2011–2015 **Indraprastha Institute of Information Technology, Delhi**, *B.Tech GPA 8.82, Computer Science.*

Skills

Proficient in Go; comfortable with Python, Java, Coccinelle.

Knowledge of SQL, NSQ, Cassandra, Prometheus, Linux, Git

Publications

2015 **Understanding Thermal Face Detection: Challenges and Evaluation**, BOOK CHAPTER IN "FACE RECOGNITION ACROSS THE ELECTROMAGNETIC SPECTRUM".

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Talks and Awards

Participated in the Outreachy panel at Open Source Summit EU 2018.

Awarded scholarship to attend KubeCon + CloudNativeCon Europe 2018.