## Jack Kleeman

Email: cv@kleeman.dev Born: July 20, 1997 Nationality: British

## Education

St Catharine's College, Cambridge - Economics First class, ranked 9th/151

## Work Experience & Career

- Senior Engineer on the Infrastructure team at Monzo, where I specialise in Kubernetes, Calico, Envoy and Vault on AWS. My highlights have been leading projects on secret distribution, certificate management, network isolation, and Cassandra authentication.
- Five weeks as a Backend Engineering intern for Monzo, building fraud detection tools using Go microservices and Cassandra, as well as front end work in React. The tools I built are used daily by the fraud team.
- Two months as an Undergraduate Research Fellow at Caltech in the Social and Information Sciences Laboratory, studying algorithmic game theory. I completed a project on search costs in decentralised markets.
- <sup>2016-17</sup> CTO of Duo Money, working on a client-side cryptography application allowing for Open-Bazaar operation in the browser using Go and Javascript.
- Six months at Everledger as a developer, working on blockchain applications in Go, as well as on Android apps and Python web applications.

## Recent Projects

Open source work. I am a regular contributor and org member of the Kubernetes and Istio communities. I am also a Hashicorp core contributor, focusing on Vault.

egress-operator, a Kubernetes operator which helps to control traffic leaving your platform using ephemeral Envoy gateways.

Cassandra authentication, a Vault plugin and associated tooling to issue and rotate tightly scoped Cassandra credentials for hundreds of services.

Network isolation, a Kubernetes network policy system which tightly isolated thousands of services.

calico-accountant, a Prometheus exporter for the Calico data path, to help with testing network policies.

Secret distribution, a system which completely overhauled the way secrets are stored and managed at Monzo, using Vault.

envoy-preflight, a wrapper which solves a sequencing problem when writing Kubernetes applications with an Envoy sidecar.