# Jordan Vlieg

**Education**: Bachelor of Software Engineering, University of Victoria

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# **Experience**

**Twitter** Senior Software Engineer, Inauthentic Accounts (Health Backend)

Nov 2021 - Jan 2023

- Implemented new CAPTCHA system to protect Twitter signups from automated and malicious actors.
  - \$3MM/year savings in infrastructure expenses by replacing legacy protection strategies.
  - > 100,000 inauthentic sign ups prevented daily. A greater than 50% reduction...
  - Reduced platform harm by stopping bad actors at signup instead of with async delayed account deletion.
- Proposed, designed and led multiple rate limiting initiatives to reduce SMS and phone spend.
  - 25% (\$12MM/year) savings in signup spend achieved, with < 0.1% reduction of user growth.</li>
  - 23Q1 planned projects (e.g., number bucketing, global SMS events) considered essential by BD stakeholders and leadership.
- Reduced meeting load by 11h biweekly, accelerated sprint velocity, and improved quality of life by engaging with the team to improve ownership of our software engineering and sprint processes.

## Stripe

Software Engineer, User Authentication Platform Backend

April 2021 - Nov 2021

- 20x reduction of DDoS traffic by improving rate limiting systems to mitigate active attacks.
- Delivered migration to use contextual clues to automatically determine owners of Ruby monolith DB models.
  - 10,000 models updated and thousands of hours of manual migration effort saved by automatically generating and issuing PRs to every owning team. Devs need only approve instead of migrating by hand.
- Formalized and documented corporate admin tool access request procedures and requirements.
  - >50% reduction of on call approver workload by heavily simplifying back and forth communications.

#### Coinbase

Software Engineer, Authentication and Authorization Backend

Sept 2019 - Jan 2021

- Designed and authored 2FA (TOTP, SMS, U2F), account security, data privacy, and data encryption systems.
- Separated sensitive and critical systems from the Ruby and Mongo monolith into microservices using Golang and DynamoDB to be horizontally scalable. These services accounted for 40% of internal gRPC traffic at peak.
- Proposed and authored the envelope encryption library for Coinbase service framework
  - Protects the company's most sensitive personal and financial data at rest.
  - Default encryption choice and recommendation for all teams and services company wide.
- Mentored several interns on various teams. Managed an intern: collaborated on a new internal OAuth client management library, resulting in an accepted return offer.

**ITN Holdings - ProvantageX** 

Software Engineer (Contract)

Jan 2019 - July 2019

**Frozen Mountain Software** 

Software Developer

Sept 2017 - Jan 2019

# **Personal Projects**

**OWIE** C++, Hardware - Github

Battery tracking modchip for electric skateboard. Prevents battery inaccuracies from voltage sag which had previously led to power failure events which injured riders.

**Doorman** Golang, Twilio API - Github An automated system that allows cell phone based apartment door boxes to open using a password. Used to secure my personal residence.

### Skills

Languages: Go, C#, Scala, Java, Ruby on Rails, C, JavaScript (React) AWS/GCP: DynamoDB, KMS, ELB, S3, EC2, Lambda, BigQuery, CloudRun

Other: MongoDB, Postgres, Docker, Regex, Git, Bash