



# CHRIS BELLEW

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## PROFILE

A passionate, experienced engineer with a desire to keep learning and growing. On a quest to be a generalist and be the best possible engineer. Looking for interesting problems and great teams. Prefers to deliver software in small pieces many times a day.

## CAREER

### **Squad Lead** - Payments Platform | VGW | July 2020 - Present (18 months)

Served as technical lead on a squad delivering new payments systems and integrations with external vendors together with management responsibilities for 5 engineers.

Event sourcing, DDD, CQRS, Kubernetes, TypeScript, node.js, React, Go, AWS

### **Senior Engineer** - Payments Platform | VGW | Feb 2019 - July 2020 (18 months)

As the first senior engineer hire on the new payments team, helped build and scale a payments system through 25x growth to reach processing of 2 billion USD/year.

Event sourcing, DDD, CQRS, Kubernetes, TypeScript, node.js, React, Go, AWS

### **Machine Learning Engineer** - R&D | Spookfish | Apr 2018 - Jan 2019 (9 months)

As the first engineer in the new R&D department I taught myself machine learning for computer vision and delivered an object detection model with 92% accuracy.

Tensorflow, Keras, Python, AWS

### **Web Developer** - Web Team | Spookfish | 2016 - Apr 2018 (2 years)

Built web based map viewer and backend mapping services from pre-launch to 1000+ users post launch.

C#, .NET Core, TypeScript, React, Azure

### **(Senior) Engineer** - Explorer | P2 | 2010 - 2016 (6 years)

Built applications and APIs for the oil & gas and mining industries. Software engineer for 5 years. Senior software engineer for 1 year.

C#, .NET, JavaScript, Angular, Silverlight

## PUBLIC

## SPEAKING

### **The Billion Event Challenge** - DDD Perth, 2021 | [YouTube](#) | [slides](#)

Personal challenge to build a system that could process 1 billion domain events into 100 million read models as fast as possible. Initially 25 minutes - eventually reduced to 18 seconds. Comparison of many compression and serialisation formats. Audience size: 100.

Rust, TypeScript, node.js, AWS, compression, serialisation, multithreading, IO

### **Modern Network Protocols** - VGW Internal Skillshare, 2020 | [slides](#)

A presentation on HTTP2, HTTP3 and QUIC. Audience size: 50.

**Machine Learning** - VGW Internal Skillshare, 2019 - [slides](#)

A presentation on the fundamentals of machine learning for engineers including computer vision and GANs. Audience size: 50.

**SIDE  
PROJECTS**

**Deepflow** | 2016 – 2018 (1500 hours)

A project with two non technical colleagues to build a real-time aggregation and visualisation platform for the oil & gas industry.

C#, .NET Core, TypeScript, Cassandra, AWS, pub/sub, DSL parser

**Icarus Trader** | 2015 (500 hours)

A solo project to try to predict the behaviour of the currency markets. Implemented dozens of market indicators and built a genetic model using chromosomal breeding and mutation.

C#, .NET, rebuilt in Rust in 2020

**Other Projects** | between 2008 and 2022

Bitcoin blockchain parser, SQL parser+engine, log query engine, 2d fluid simulation, Ethereum utility token marketplace, electricity plan comparison engine, Snowflake prometheus exporter, personal shares tax calculator.

**SKILLS**

**Languages**

TypeScript, Rust, JavaScript, C#, Python, Go, Java

**Frontend Technologies**

React, Angular, Redux, Webpack, d3, three.js, Sass, WebSockets

**Backend Technologies**

Node.js, Express, .NET Core, Docker, PostgreSQL, SQL Server, Cassandra

**Cloud Native Technologies**

Kubernetes, Helm, Prometheus, Grafana, Alert Manager, Loki, Jaeger, Trivy, OAuth2 Proxy

**Cloud Technologies**

EKS, ECS, Fargate, EC2, Lambda, IAM, VPC, S3, Kinesis, Dynamo DB, RDS, Cloudfront, EBS, EFS, Route 53, WAF, Secrets Manager, Snowflake

**Blockchain Technologies**

Ethereum (Solidity), ERC-20, ERC-721, Solana (Rust)

**EDUCATION**

**Software Engineering (Distinction)**

Curtin University, Western Australia | 2008 - 2010