

# Matthew Bidewell

Senior Software Engineer

📍 London, UK | 📧  | 🔗 <https://www.matty.dev> | 🌐 <https://github.com/MattBidewell>

## Summary

Product-orientated Senior Software Engineer with 7+ years of experience specializing in low-latency, high-throughput cloud solutions using NodeJS and Go. Proven track record in architecting scalable microservices, optimizing system performance, and leading small engineering teams. Experienced in AWS cloud infrastructure and serverless technologies.

## Experience

**Beamery**  
Senior Software Engineer  
<https://www.beamery.com>

**February 2023 - Present**  
London, UK

- Led complete redesign of ETL pipeline using NestJS, Kafka and TypeScript on Kubernetes, resulting in 55% cost reduction and 600%+ reliability improvement.
- Diagnosed and resolved critical bugs in the legacy GoLang ETL pipeline while maintaining system stability.
- Led the "Backend Tribe" community initiative to foster knowledge sharing and improve developer experience across engineering teams.
- Conducted technical interviews and contributed to engineering hiring decisions.
- Delivered technical presentations as a company representative at the London NodeJS Usergroup.

**Government Digital Services**  
Software Engineer  
<https://www.gov.uk>

**January 2022 - February 2023**  
London, UK

- Architected and implemented the core identity verification platform using AWS Lambda, DynamoDB and TypeScript, now serving millions of UK citizens across major government services.
- Led technical migration from Java serverless functions to NodeJS serverless functions, reducing cold start times by up to 40%.
- Developed and maintained critical open-source packages used across multiple government departments, improving cross-department code reuse.
- Founded and facilitated monthly GDS NodeJS community meetups, fostering knowledge sharing across 50+ engineers.
- Authored comprehensive technical RFCs and Architecture Decision Records (ADRs) that established serverless and NodeJS as the standard for new government services.
- Championed modern development practices through the implementation of automated testing and CI/CD pipelines.

**A Million Ads**  
Senior Software Engineer  
<https://www.amillionads.com>

**January 2020 - January 2022**  
London, UK

- Led a team of 5 engineers in destructing a monolithic backend into microservices.
- Architected and implemented a real-time analytics platform using NodeJS that processed 100+ million daily records through Elasticsearch, AWS Firehose, and S3.
- Optimized core Ad Engine performance using Rust and Typescript, reducing ad generation latency from 200ms to sub-100ms, resulting in 40% higher campaign completion rates.
- Presented technical architecture and Rust implementation details at the Rust London Meetup.
- Managed and mentored 3 direct reports and apprentice engineers.
- Revamped the technical hiring process by introducing pair programming exercises to improve the candidate experience and reduce our time-to-hire.

**A Million Ads**  
Software Engineer  
<https://www.amillionads.com>

**April 2018 - Janaury 2020**  
London, UK

- Designed and implemented an ML-based adaptive scaling algorithm using historical traffic patterns.
- Architected and developed core backend services using NodeJS and TypeScript that scaled from handling 1M to 100M+ daily requests as the engineering team grew from 2 to 25.
- Established monitoring and alerting infrastructure using SumoDog to assist in our 99.97% uptime for critical ad services.
- Introduced automated testing and CI/CD pipelines with BitBucket, automating our deployment process.

**Future Shop**  
Web Developer  
<https://www.futureshop.co.uk>

**January 2017 - April 2018**  
London, UK

- Developed and maintained an e-commerce solution using the Magento platform.
- Implemented responsive web designs using HTML, CSS, JavaScript, and PHP.

## Education

**University of Hertfordshire**  
Computer Science - Software Engineering and Web Development  
2:1

**September 2013 - June 2016**  
Bachelors of Science

## Projects

**NodeJsByExample | Creator & Maintainer**  
<https://nodejsbyexample.dev>

- Created and maintain an educational platform teaching NodeJS through annotated, practical examples
- Developed comprehensive, hands-on learning materials focusing on NodeJS patterns and best practices
- Open-source project showcasing real-world NodeJS implementations and common design patterns

**Personal Blog & Portfolio**  
<https://matty.dev>

- Designed and maintained a personal technical blog focused on software engineering insights
- Authored technical articles on cloud architecture, NodeJS, and software development best practices hosted on here and medium.com

## Technical Skills

### Languages & Frameworks

- Expert: TypeScript, NodeJS, JavaScript, Express
- Proficient: NestJS
- Growing: GoLang

### Databases & Storage

- Databases: MySQL, DynamoDB, Redis, MongoDB
- Storage: S3, GCP Cloud Buckets, Elasticsearch

### Cloud & Infrastructure

- Cloud: AWS, GCP
- Infrastructure: Kubernetes, Terraform, Serverless
- Message Queues: Kafka, AWS SQS, GCP PubSub

### Development & Testing

- Testing: Jest Integration Testing, E2E Testing
- Monitoring: Grafana, PagerDuty
- Documentation: RFCs, ADRs, Technical Writing