

Mia Matyszewska

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Software Engineer; Backend Systems & Infrastructure | Right to work in UK, EU

EXPERIENCE

Junior Software Engineer

Sep. 2025 – Present

Fantom Factory

Neath, Wales

- Developed a tokeniser and parser pipeline with schema-driven validation for a proprietary dashboard programming tool, contributing to a 4.4x average decrease in load times across 150+ installations
- Automated chained edge instance monitoring through developing a telemetry tool to sync resources, system info, and files, reducing manual monitoring of 60+ remote sites by over 80%
- Implemented parallelisable, resumable, multipart uploads through an AWS S3 file mount service, with full unit and integration test coverage, eliminating failed backup uploads over unstable connections for 120+ sites
- Resolved errors in existing syntax highlighter by refactoring PEG grammar rules, increasing accuracy by 35%
- Ported a recursive config resolution function to a native implementation with dependency-aware caching, improving real-world performance by 3.2x
- Implemented support for an additional package format across two package management platforms by reverse engineering compiler internals and developing a lightweight parser for its proprietary schema language to extract package metadata

EDUCATION

UCL (University College London)

Oct. 2026 – 2029 (Expected)

BSc Computer Science

London, England

NPTC Group of Colleges

Sep. 2023 – Jun. 2025

A Levels in Further Mathematics (A), Mathematics (A*),
Computer Science (A), Economics (A)*

Neath, Wales

PROJECTS

Dynamic Reverse Proxy | *Java, Spring WebFlux, MongoDB, REST*

- Built a reverse proxy with dynamic routing, currently serving 30+ live endpoints
- Designed a syntax for expressing dynamic destination routes in terms of incoming path segments and subdomains
- Leveraged Spring WebFlux, MongoDB indexes, and route caching, to facilitate 350+ concurrent requests
- Developed JavaScript injection functionality, enabling per-route response manipulation
- Exposed a REST API and Java API client library, facilitating dynamic cache and route manipulation

Self-Hosted Deployment Server | *Java, Spring Boot, Docker, GitHub Actions, SSE*

- Designed a deployment pipeline integrated with GitHub Actions, orchestrating 20+ personal services via Docker
- Automated branch-aware web deployments via dynamic reverse proxy endpoint provisioning from Dockerfile labels
- Exposed REST/SSE endpoints and created Java API client for remote container lifecycle management
- Built a real-time dashboard over the container API using SSE for live status updates

Market Aggregator | *Java, Spring Boot, JavaScript, HTML/CSS*

- Developed a service polling 3 external APIs to aggregate, cache, and serve price, volume, and spread data, from 2 exchanges, spanning 1,800+ items
- Exposed detailed aggregate information via a REST API, utilising path variables and request parameters to facilitate efficient and targeted access over 12,000 average daily requests
- Built a website to simplify data access, providing live spreads, volumes, and historical price graphs, for all assets

TECHNICAL SKILLS

Languages: Java, C, Bash, JavaScript, SQL

Frameworks: Spring Boot, Spring WebFlux, JDA

Developer Tools: Git, Docker, AWS, GitHub Actions, Nginx, Linux