

# Felix Chapman

London, UK

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Software engineer with 8 years of development experience, skilled in Java, Scala, Python and Rust.

## EXPERIENCE

### eMed UK, formerly Babylon Health

London, UK

#### Senior Software Engineer

May 2023 – Present

#### Software Engineer

April 2019 – May 2023

Developing scalable data pipelines and platforms for internal teams and external partners.

- Developed Health Graph, a unified view of customer health data, which piped billions of Kafka events from hundreds of providers into OpenSearch and exposed a GraphQL API in FHIR format.
- Mentored and supported engineers and clinicians to independently integrate their products with Health Graph and make their data available to other teams.
- Designed and built ETL pipelines in Python, making partners' data available to analysts.
- Provided 24/7 on-call support for 30+ microservices addressing errors and ensuring system reliability.
- Designed and implemented automated Proto schema publication in CircleCI and S3, enabling teams to quickly iterate on their schemas.
- Created an internal collaborative Slack tool written in Scala for looking up terms and acronyms.

### TypeDB, formerly Grakn Labs

London, UK

#### Core Developer (Software Engineer)

Nov 2015 – Mar 2018

Created Graql (renamed TypeQL, [typedb.com/docs/typeql/](https://typedb.com/docs/typeql/)), a declarative pattern-based query language using Java and ANTLR.

- Developed a query planner to transform Graql queries into efficient Gremlin graph traversals.
- Designed a fast, remote query execution solution with Protocol Buffers and gRPC to stream results over HTTP, implementing a server and remote clients in Java, Python and Haskell.
- Improved performance of query execution in a movie semantic search engine.
- Established company processes including code reviews and automated testing.

## EDUCATION

### University of Southampton

Southampton, UK

MEng Computer Science with First Class Honours 2011 - 2015

## VOLUNTEERING

**Montana Youth Hostel**  
**Social Volunteer**

Bergen, Norway  
Aug 2018 - Oct 2018

## PROJECTS

**Skakoui** [lichess.org/@/skakoui](https://lichess.org/@/skakoui)

A traditional chess bot that competes online.

**NES emulator** [github.com/aelred/nes-rust](https://github.com/aelred/nes-rust)

A NES emulator written in Rust.

**Tetris** [tetr.is.ael.red](https://tetr.is/ael.red)

Project to learn Rust. Used SDL and compiled into Wasm.

**Starling** [github.com/aelred/starling](https://github.com/aelred/starling)

A functional programming language implemented in Python.

## SKILLS

### Programming Languages

Proficient in Java, Scala, Python and Rust.

Experience with JavaScript, TypeScript, C#, C, Kotlin and Haskell.

### Key technologies

Terraform; Kubernetes; AWS; S3; OpenSearch; Kafka; Git; GraphQL; Protobuf; Spring