

FELIX CHAPMAN

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PERSONAL STATEMENT

Software engineer with 7+ years of professional experience in backend development primarily in Java, Scala, Python and Rust.

EXPERIENCE

2023

Babylon Health (<https://www.babylonhealth.com>)

Senior Software Engineer

- Designed and developed data ingestion pipelines using Python to extract partner's healthcare data, transform it into our internal standardised format and load it into our Health Graph, enabling crucial analytics use cases.

2019 - 2023

Babylon Health (<https://www.babylonhealth.com>)

Software Engineer

- Developed Health Graph, a unified view of our healthcare data, which reads events from Kafka, writes them to Elasticsearch and exposes them as BigQuery tables and in a standard healthcare data format (FHIR) with a GraphQL API.
- Supported several teams to integrate with Health Graph, coaching developers and clinicians on how to write schemas and how to publish healthcare data events until they were able to do this themselves.
- Designed and developed a "self-serve" approach for teams to publish new data types to Health Graph, including publishing new schemas which are automatically pushed to S3, transformed into protobuf and made available in Health Graph.
- Created What the Fox, an internal Slack tool written in Scala for looking up acronyms and jargon. Anyone can contribute terms and the tool tracks frequently requested terms.

2015 - 2018

Vaticle (formerly Grakn Labs, <https://typedb.com/>)

Core Developer (Software Engineer)

- Created TypeQL (formerly Graql, <https://typedb.com/docs/typeql/2.x/overview.html>), a declarative pattern-based query language that operates on the TypeDB (formerly Grakn) graph database, implemented in Java, using Tinkerpop and ANTLR.
- Achieved remote query execution using protocol buffers and gRPC to stream results over HTTP. I implemented remote clients in Java, Python and Haskell.
- Improved performance of query execution in Moogi - a movie semantic search engine used to demonstrate our software stack.
- Supported loading database schemas into the graph by building a parser for CTM (compact topic map) files.
- Helped implement company processes such as code reviews and automated testing using Travis CI and Jenkins.

2014

University of Southampton

Internship, PLEASED project

- Classified signals from plants in response to stimulus with Python.

VOLUNTEERING

2018 **Montana Youth Hostel, Bergen** (<https://www.montana.no/>)
Social Volunteer

PROJECTS

Skakoui A traditional chess bot, that competes online (<https://lichess.org/@/skakoui>)

NES emulator A NES emulator written in Rust. (<https://github.com/aelred/nest-rust>)

Tetris Project to learn Rust. Used SDL and compiled into Wasm. (<https://tetris.aelred/>)

Starling A functional programming language implemented in Python. (<https://github.com/aelred/starling>)

EDUCATION

2011 - 2015 **University of Southampton**
MEng Computer Science with First Class Honours

SKILLS

Programming languages Proficient in Java, Scala, Python and Rust.
Experience with JavaScript, TypeScript, C#, C, Kotlin, Haskell and Visual Basic.

Technologies gRPC, protocol buffers, Git, ANTLR, SDL, Tinkerpop, Gradle, Maven, CircleCI, Jenkins, FHIR, Terraform, Kubernetes