walterschulze

mail@awalterschulze.org | | awalterschulze.org

location

London, UK

programming

Golang, Lean, Coq, Haskell, Elm, Erlang, Latex, React, Rust

open source

Katydid: Validation Language for Deeply Nested Structures

Goderive ★1000
Derives Go functions

GoGraphviz ★500
Parser for Graphviz

gogoprotobuf ★5000
Protobufs for Go

erlfmt ★300
Formatter for Erlang

fbthrift
Facebook's Thrift Go Library

publications

IEEE Multimedia: Music Generation with Markov Models

conferences

GopherCon UK 2022, 2023, Devoxx UK 2022, Scotsoft 2023. See recorded talks

interests

Proof Assistants
Guitar
Music Production
Stand-up Comedy

employment

2023 - 2024 ∞ **Meta** London, UK
Go Language Tooling Engineer: Golang, Thrift
Implemented Rocket transport for Go thrift to unblock streaming support for Go in future. Consolidated internal community Go thrift libraries into single open source library. Served on Meta's Modern Code Board.

2021 – 2023 ∞ **Meta** London, UK
Front-end UI Engineer: React, Unreal Engine 5
Created Device Manager UI for VR devices. Developed multiplayer game for Meta's Quest as part of Developer Advocate rotation. Conducted behavioural interviews. Bootcamp Manager.

2020 – 2021 **WhatsApp** London, UK
Erlang Language Tooling Engineer: Erlang
erlfmt: A code formatter for erlang, a code generator for concurrency and VSCode integration. Conducted coding interviews.

2018 – 2020 **Facebook** London, UK
Senior Software Engineer: Haskell, Python, Rust
Extended security eDSL in Haskell, which significantly reduced false positives. Integrated QuickCheck into Haxl. Maintained common test runner for all backend and mobile programming languages. Designed foundation for new test runner using a Monad with Monoid constrained elements to create a batched stream for concurrent test running. Mentored students.

2016 – 2018 **eBay Classifieds Group** Amsterdam, The Netherlands
MTS1 Software Engineer: Elm, Go, Docker, Filebeat, Cassandra, Kafka, Consul, Nomad, Grafana, Kibana and Jenkins
Developed translating reverse proxy to show eBay ads on classifieds sites, serving 2000 requests per second. Added A/B testing framework, LDAP role based login and UI using Elm. Served on the global Architecture team, conducted interviews and provided support for five local markets.

2011 – 2016 **Vastech** Stellenbosch, South Africa
Query Language Developer: Go, Protocol Buffers, Javascript
As part of a team, developed a distributed database from scratch, for fast writing of time series data. I developed the query language, matching algorithm, metadata serialization, index configuration, update method for our write only database and the UI. I founded and led the intern program and initiated the company's open source policy.

2006 – 2011 **Various companies** South Africa
Mobile Developer: Java
linkedin.com/in/awalterschulze/

education

2007–2009 **MSc** Computer Science **(cum laude):** Python Stellenbosch University
A Formal Language Theory Approach to Music Generation
Generated music with Mixed order Hidden Markov models.

2003 – 2006 **BSc Honours** Computer Science: C, Java Stellenbosch University