



Frank Schröder

Curriculum Vitae

Distributed Systems Engineer | Go Developer

Nijmegen, NL

Profile

Senior Software/Network Engineer and Team Builder with 30+ years of experience in distributed systems, scalable architectures, industrial manufacturing, and MES/SCADA systems. Proven track record in designing elegant, low-maintenance solutions, building high-performing teams, and optimizing complex systems.

Author and maintainer of several open-source Go libraries, including `fabio`, `gopcua`, and `properties`. Full-time Go developer since 2011, with expertise in troubleshooting, automation, and scalable backend design.

Experience

Staff Software Engineer

2025 - present

Stream, Amsterdam & Remote

- > Built bare-metal CI system – 5x faster, 3x cheaper, hosted in Europe.
- > Identified bottlenecks in existing Go unit testing approach and built a new test harness for 10,000 tests.
- > Identified bottlenecks in existing deployment flow, designed new solution and migration path.
- > Built new faster deployment tool for the existing codebase.
- > Enhancing `go-tool-cache` with distributed caching, consistent hashing, and no single point of failure.
- > Investigated Nomad for running workloads.

Principal Software Engineer/Architect

2018 - 2025

Northvolt, Stockholm

- > Built Northvolt's first connected battery gateway system, deployed on hundreds of batteries, including hardware selection, software development, and 24x7 troubleshooting.
- > Architected and implemented industrial data acquisition systems for thousands of machines, running on factory-floor k3s clusters.
- > Developed and maintained a native open-source Go OPC/UA library, now widely used in factory systems.
- > Grew the Edge Computing team from 3 to 12 members, mentoring junior developers and standardizing interview procedures across the software organization. Performed 300+ interviews.
- > Led the design of Northvolt's next-generation MES system for large-scale battery manufacturing.
- > Delivered live presentations to 100+ members of the digitalization department.

Software Engineer

2017

HashiCorp, Amsterdam

- > Maintained Consul, stabilizing tests, builds, and startup times while eliminating race conditions and refactoring configurations.
- > Developed go-discover, a cloud auto-discovery library, and became the #3 committer within six months.
- > Continued development and maintenance of fabio, a consul-aware cloud load balancer.

Architect, Team Lead

2012 - 2017

Marktplaats/eBay, Amsterdam

- > Transformed the pay-per-click advertisement system into a scalable SaaS platform, deployed in three countries.
- > Grew the team from 3 to 15 senior developers, conducting 120+ interviews and optimizing team composition.
- > Migrated Java/Scala microservices to Go, improving scalability and maintainability.
- > Open-sourced fabio, a zero-conf HTTP(S) load balancer.

Freelance Web Application Developer

2010 - 2011

Enaikoon GmbH, Berlin

- > Designed and developed a geo-tracking system with a fully asynchronous, stateless architecture using JavaScript and Java.

Consultant

2010 - 2011

Creolink, Yaoundé, Cameroon

- > Planned and installed a virtualization solution using VMware ESXi 4.x, reducing maintenance and operational costs.

Consultant

2010

Ministry of Environmental Protection/CIDE, Yaoundé, Cameroon

- > Set up and configured a web server and training environment using Ubuntu Linux and KVM virtualization.
- > Developed and delivered hands-on training courses for three administrators.

Partner

2004 - 2010

SharpMind, Frankfurt, Germany

- > Led development of scalable server-based applications, including navigation servers, product registration systems, and game servers.
- > Managed 24x7 hosting infrastructure with 50 physical and 150 virtual servers.

Senior Software Engineer

2000 - 2004

AirFlash/Webraska, Frankfurt, Germany

- > Designed scalable proximity search algorithms, achieving a 20x improvement in response times.
- > Migrated build processes from make to ant, reducing build times from 5 minutes to 15 seconds.

Senior Consultant/Architect

Jan - Apr 2000

CSC Ploenzke AG, Frankfurt, Germany

- > Architected and reviewed the portal architecture for a bank's news platform.
- > Designed and implemented data input drivers for managing content feeds.
- > Managed a team of developers to deliver data import modules.
- > Set up independent internet access for 15 consultants.

Senior Consultant/Architect

1997 - 2000

Netscape, Munich, Germany

- > Designed and implemented large-scale automated web-hosting and email systems.
- > Developed user interface frameworks using server-side JavaScript and LDAP.
- > Installed and configured Netscape server software on scalable Solaris systems.
- > Delivered training to 3rd-party support staff for Netscape's customers.

Freelancer/Software Engineer

1989 - 1997

Germany

- > Conducted code reviews and trained developers in C++ and software development.
- > Managed a small development team for multimedia system projects.
- > Designed and implemented a multimedia system for US Forces housing areas in Germany.
- > Developed several shareware programs, including StickyNotes for Windows 95.

Education

Masters of Computer Science

1997

University of Saarbrücken, Germany

Skills

Programming:

Go, TypeScript, Bash, SQL, Java, JavaScript, Terraform, C/C++, Objective-C

Management: Team building, project management, technical training

Systems: Linux, Windows, Solaris, MacOS X

Databases: MySQL, SQLite, Postgres, DynamoDB

Networking: Web servers, TCP/IP protocols, load balancing, debugging

Languages:

German (native), English (fluent), Dutch (fluent), Swedish (intermediate), French (basic)

Open-Source Projects

- > [gopcua](#) - Native Go OPC/UA library
- > [fabio](#) - Zero-conf HTTP(S) router for Consul
- > [properties](#) - Go properties library
- > [Consul](#) - Maintainer at HashiCorp

