Jonathan Wase

Download PDF

Software Engineer

Linköping, Sweden jonathan@familjenwase.se github.com/Julgodis
linkedin.com/in/jonathanwase

Profile

Software engineer with five years at Ericsson working on pre-commercial 5G positioning and GNSS positioning. I build C++ systems across a client stack deployed on embedded Linux devices (Raspberry Pi, BeagleBone) and server-side services running in Linux, covering algorithm design, 3GPP protocols, and the full product lifecycle through direct customer trials.

Most engaged by work where low-level systems meet real hardware: protocols, embedded targets, and the messy boundary in between.

Experience

Software Engineer

2021 – Present

Ericsson, Linköping, Sweden

- Primary author of the open-source SUPL / 3GPP LPP client (C++) running on embedded Linux devices (Raspberry Pi, BeagleBone), implementing the 3GPP LPP protocol with RTK, SSR, and OSR correction support.
- Built and operate the pre-commercial location server behind multiple parallel customer trials, with Grafana-based observability, and implemented the LPP request/provide flow end to end across client and server.
- Led tokoro, a GNSS correction module converting OSR to SSR, and built the LPP RTK and SSR correction-data converters used across the 5G positioning product line.
- Applied deep, hands-on GNSS positioning knowledge (signal behavior, error sources, and correction algorithms), validated against commercial receivers (Trimble, u-blox) across the software / protocol / hardware boundary.

- Built and maintain the cross-compilation and deployment path (CMake toolchains, Docker) for Raspberry Pi and BeagleBone targets.
- Owned features through the full product lifecycle: requirements, system design, implementation, integration, testing, and direct customer trials.
- Mentored a master's thesis student and several summer interns; use AI coding assistants (Amazon Q / Kiro, Claude) in daily development.

Master's Thesis: Positioning Exposure API

2021

Ericsson, Linköping, Sweden

- Designed an API for exposing 5G network positioning data to external applications.
- Analyzed 3GPP standards to define the requirements and interface specifications.

Summer Intern

2019 – 2020

Ericsson, Linköping, Sweden

- Contributed to early-stage GNSS positioning prototypes; received a full-time offer based on performance.

Education

Linköping University

2016 – 2021

M.Sc. in Computer Science and Engineering (Civilingenjör), Linköping, Sweden

Skills

Programming languages	C++, C, Python, Rust, Java, Shell, SQL (basic)
Tools & technologies	GCC, GDB, CMake / Make, Docker, Cross-compilation, Embedded Linux, GNSS receivers (Trimble, u-blox), Git, Grafana
Domain	3GPP, 5G positioning, LPP, SUPL, GNSS, GNSS signal processing, RTK, SSR, PPP, Numerical algorithms
Languages	Swedish (Native), English (Fluent), Japanese (JLPT N5, studying toward N4)

Selected projects

SUPL / 3GPP LPP Client

Ericsson/SUPL-3GPP-LPP-client

Primary author, 2021 – Present

Open-source C++ toolkit for 3GPP LPP clients: SUPL transport, GNSS assistance-data retrieval, and conversions to receiver-facing correction formats. Built and exercised on embedded Linux targets.

Twilight Princess Decompilation

zeldaret/tp

Contributor, Open source

Contributor to a matching decompilation of The Legend of Zelda: Twilight Princess: reverse-engineering PowerPC assembly into C/C++ that rebuilds into the original binary.

© 2026 Jonathan Wase

Email GitHub LinkedIn

Commit 27e69e4 · Built 2026-09-29