Stefan Yohansson

Software Engineer

I am an open source passionate that love to learn, share and contribute particularly on any initiative that make the world equal to everyone. I help here and there in opensource pojects like Firefox, some KDE suite softwares, GNOME and FreeSWITCH platform.

Skills

- Polyglot engineer, strong expertise for general backend, frontend and embedded development
- Proficient in C, C++, Rust, Python, Elixir, JavaScript, familiar with Java, Lisp/Scheme/Clojure, Go.

Work Experience

- 2022.2–Present: Senior Developer at Sangoma

  - skills: C, FreeSWITCH (Telephony platform), Elixir, Distributed Systems, RabbitMQ, Python
  - Monitor and maintain 24/7 telephony service availability, implementing automated recovery systems for critical failures
  - Enhanced and maintained ACD (Automatic Call Distributor) system, optimizing agent-customer matching algorithms in CCaaS platform
  - Provide technical leadership and troubleshooting expertise across the entire telephony platform
  - Authored comprehensive technical documentation and feature analysis for current and upcoming platform capabilities

- 2021.2–2022.8: Senior C/C++ Developer/Consultant at Telnyx

  - skills: C, C++, FreeSWITCH (Telephony Platform), Distributed Systems, RabbitMQ, WebRTC
  - Maintained 24/7 FreeSWITCH service monitoring and implemented automated failure recovery mechanisms
  - Served as technical liaison between FreeSWITCH and WebRTC development teams, resolving complex integration challenges
  - Developed and enhanced mod_{verto} (WebRTC FreeSWITCH module), implementing new functionalities and resolving critical bugs in C

- 2019.1–2020.11: Software Consultant at MobileMinds

  - skills: Javascript, React, Node, Typescript
  - Architected and developed a scalable Node.js backend infrastructure for Ology pharmaceutical integration platform

- 2015.2–2018.12: Senior Developer at Evolux
  - skills: Python, Javascript, Node, Typescript, Angular 1.6, C, FreeSWITCH (Telephony Platform)
  - Maintained 24/7 telephony service monitoring and implemented automated failure recovery systems
  - Developed AngularJS version of Verto Communicator for FreeSWITCH project, deployed in weekly FreeSWITCH conferences
  - Led frontend refactoring initiative, optimizing real-time performance using Python, Redis, and SocketIO
  - Managed team of 4+ developers on SilentCircle outsourced project, delivering React/Redux SPA with real-time security telephony dashboard
  - Migrated Verto Communicator from AngularJS to React, significantly improving performance and user experience
  - Architected migration of core call center module from FreeSWITCH ($mod_{callcenter}$ in C) to distributed Elixir application

- 2014.8–2014.12: Senior Developer at Stepmoney Brasil S.A
  - skills: PHP, React, D3.js
  - Led backend development team specializing in financial modules and Brazilian credit card payment integrations
  - Implemented comprehensive testing and documentation standards for secure credit card processing systems
  - Designed and executed real-world simulation testing on dedicated testnet infrastructure
  - Developed interactive genealogy tree visualization using React and D3.js for user indication tracking system

- 2013.2–2014.8: Developer at Tecnotech Sistemas
  - skills: PHP, Database Optimization
  - Led financial module development for governmental system serving all Brazilian engineers and architects
  - Resolved critical performance issues by refactoring high-load polling tasks and optimizing expensive database queries
  - Implemented materialized views solution, significantly improving system performance for annual billing processes

- 2013.8–2013.11: Developer Trainee at MaisData Comunicação Direta
  - skills: PHP, WordPress
  - Managed and maintained 30+ client websites on shared hosting infrastructure
  - Gained foundational experience in WordPress development and digital agency operations

- 2010.4–2013.6: Network Developer at Digicontrol - ISP
  - skills: C, Asterisk (Telephony Platform), PHP
  - Managed 24/7 operations of complex radio access network infrastructure with 500+ remote radio heads
  - Developed and configured Asterisk IVR systems for ISP clients, optimizing call routing and user experience
  - Implemented codec adaptations for high-latency networks and performed packet loss analysis using Homer capture tools

Open Source Experience

- KDE games
    - skills: C++, Qt Framework
    - Fix bugs in some KDE default games and be the maintainer of AMOR project;

- KTelephone
    - skills: C++, Qt Framework
    - Initial developer of the VoIP softphone application written in C++ with Qt. Inspired by "Telephone" the OSX application;

- Firefox
    - skills: C++, React
    - Fix bugs in firefox dev tools and the bridge between dev tools and core;

- FreeSWITCH
    - skills: C, Javascript
    - Fix bugs in modules like $mod_{callcenter}$, mod_{verto}, $mod_{voicemail}$ and help in some proprietary modules;
    - Create a test application to act as bedrock for integrations with mod_{verto};

Education

- 2012–2016: Incomplete Bachelor degree in Mathematics at University Federal do Rio Grande do Norte
- 2022–2023: Real-Time Embedded Systems Concepts and Practices at University of Colorado Boulder (Coursera)
- 2022–2023: Real-Time Mission-Critical Systems Design at University of Colorado Boulder (Coursera)

Contact Me

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