Gnuxie

EMAIL: Gnuxie@protonmail.com
GITHUB: Gnuxie
MATRIX: @gnuxie:matrix.org
LOCATION: United Kingdom

SUMMARY

An independent developer working on safety for the instant messaging protocol Matrix. In the long term, working on an abstract machine that will serve as a substrate for a new generation of capability-safe dynamic-interactive programming languages. A dynamic-interactive object system hacker, a Smalltalk dreamer.

KEYWORDS: Matrix, Trust and Safety, Distributed Systems, TypeScript, JavaScript, Rust, Common Lisp, and Python

OCCUPATIONS

Marewolf Lead for the DRAUPNIR project   JANUARY 2023-PRESENT
The Draupnir project is an all inclusive moderation platform for Matrix with a modular and capability based plugin system, developed with cooperation from a strong contributor community, and depended upon by hundreds of communities that reside in the Matrix ecosystem.[1] Draupnir is an independent, community focused project that uses a triage system dedicated to maximizing usability to plan development. Draupnir is currently being supported with a grant from NLnet and has a clearly defined roadmap. The project inherits legacy and inertia from its predecessor project MJÖLNIR so its core is currently being re-written and is provided as a library, the MATRIX-PROTECTION-SUITE, for any bot, client or web-widget to use. This re-write is now mostly complete, and is seeing success in the Draupnir v2.0.0-beta programme.
STACK: **TypeScript** and **Node.js**

Software Engineer at ELEMENT, **Lead Developer** for MJÖLNIR, Remote   JULY 2021-DEC 2022
Designed and Maintained abuse mitigation tooling for the open decentralized instant messaging protocol Matrix. Revived a legacy project, Mjölnir (an open-source moderation tool for Matrix), from maintenance mode, attending to the Matrix community's safety needs and overseeing a transition to multi-tenancy for Mjölnir deployments. Responsible for and engaging in community communication, support and advocacy for Mjölnir, working closely with content moderators to understand their needs and develop solutions with them. Wrote *the* technical report that informed the company strategy in regards to *Distributed Reputation*.
STACK: **TypeScript**, **Node.js**, **Rust**, and **Python**.

Co-Founder (hobby project) at COOPERATIVE OF APPLIED LANGUAGE   DEC 2019-PRESENT
Designing a substrate abstract machine, Utena VM, for a new generation of capability-safe dynamic-interactive programming languages.
Co-authoring a suite of in-depth commentary on the state of software development, programming language design & implementation, minimalism, and safety.
STACK: **Common Lisp** and **TypeScript**.

Maintainer for the SICL project, commissioned work, Remote   MAY 2021-OCT 2021
Maintained the Cluster x86 Assembler and developed an accompanying Disassembler. Wrote a complete fuzz test to assemble and disassemble every instruction described within Cluster's instruction database.
STACK: **Common Lisp**, and **IA-32 and Intel 64 Architectures**.

Student Developer at REDACTED, CONTACT ME   JULY 2019-MAY 2020
Maintained legacy Java software that was built for the providers of quality assurance programs, handled support requests from customers and automated extremely labourious data extraction processes.
STACK: **Java**, **JavaScript**, **Groovy**, and **Python**.

EDUCATION

Bsc (Hons) COMPUTER SCIENCE First class degree   SEP 2017-JUN 2021
Sheffield Hallam University
MODULES: Functional programming, Software Architecture And Design, Machine Learning, Concurrent And Parallel Systems.
TECHNICAL PROJECT: Prototype the substrate virtual machine that would later become Utena AM and produce a report about the prototype and the experience.
STACK: **C++**, **Java**, **Clojure**, **JavaScript**, and **Python**.