

Gnuxie

EMAIL: Gnuxie@protonmail.com

GITHUB: [Gnuxie](https://github.com/Gnuxie)

MATRIX: [@gnuxie:matrix.org](https://matrix.org/@gnuxie:matrix.org)

LOCATION: United Kingdom

SUMMARY

An independent developer working on Trust & Safety tooling for the instant messaging protocol [Matrix](#).

Dynamic-interactive object system hacker, Lisp and `Smalltalk` dreamer.

In the background, designing a substrate VM for object capability programming languages.

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

OCCUPATIONS

Lead Developer for the [DRAUPNIR](#) project JANUARY 2023-PRESENT
The Draupnir project is an all inclusive moderation platform for [Matrix](#) with a modular plugin system, developed with cooperation from three other regular contributors, and estimated to be depended upon by hundreds of communities who reside within the [Matrix](#) ecosystem.¹ 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.
STACK: **TypeScript**.

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, Rust, and Python**.

Co-Founder (hobby project) at [COOPERATIVE OF APPLIED LANGUAGE](#) DEC 2019-PRESENT
Designing a substrate virtual machine, [Utena VM](#), for a new generation of capability based 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 VM](#) and produce a [report](#) about the prototype and the experience.
STACK: **C++, Java, Clojure, JavaScript, and Python**.