

SCUTI

<https://scuti.neocities.org/portfolio> | <https://codeberg.org/scuti> | scuti@tutamail.com

Self-driven software developer experienced in C, C++, Python, and Linux with projects ranging from a game engine to a userspace device driver, seeking an entry-level position.

INFO

- **Skills:** C, C++, Python, Lua, Ada, SQL, HTML, CSS, data visualization, machine learning
- **Tools:** gcc, gdb, git, Gitea, Jenkins
- **Real Name:** *****

WORK EXPERIENCE

Wildfire Games | Open Source Contributor (2024 Dec, Intermittent)

- Improved the stability of pyrogenesis, the custom game engine of 0 A.D; credited as of Alpha 27 release.
- Added mesh validation and CI pipeline checks, preventing black screen bugs.
- Documented build instructions for Void Linux, simplifying dependency setup and build process.
- Interacted with a distributed team, submitting pull requests and engaging in code reviews.

Analyst (LC-MS) (2023 Mar - Current) ← Lab Assistant (2021 Aug)

- Performed initial review of data, verifying batches met quality control standards before release.
- Conducted assays for controlled substances such as fentanyl and amphetamines.
- Tested specimen validity, investigating false negatives or adulterated samples.

PROJECTS

reflex2q3 (*Map Converter*)

<https://codeberg.org/scuti/reflex2q3>

- Developed a tool to convert Reflex Arena map files to Quake III, handling differences in brush and entity definitions.
- Integrated Catch/2-based unit tests to safeguard against regressions in map parsing.
- Fixed the sea urchin bug.

hanvon-linux (*Userspace Linux Driver*)

<https://codeberg.org/scuti/hanvon-linux>

- Built a userspace driver in C to enable legacy Hanvon pen tablet support on modern Linux systems.
- Used low-level USB libraries and input event frameworks to read device packets and interpret pen input.
- Enabled input in drawing applications (e.g Krita), proving usability beyond cursor emulation.

xdfcgi (*Game Server Dashboard & Leaderboard Import*)

<https://codeberg.org/scuti/xdfcgi>

- Built a web dashboard displaying player leaderboards.
- Imported and cleaned server leaderboard data into an SQLite3 database for efficient querying and reporting.
- Delivered a usable system for the administrator and players, improving engagement and transparency.

lib3ddevill (*Library and demos*)

<https://codeberg.org/scuti/lib3ddevill>

- Developed tools to read and export 3D models and textures from proprietary formats.
- Implemented foreign function interface to Python using ctypes.

SELF-STUDY / EDUCATION

- Udacity | **Data Science Nanodegree** (*In-progress*)
- Udacity | **Intro to Machine Learning**