

Aidan Sojourner

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SKILLS / MINOR PROJECTS / OPEN-SOURCE CONTRIBUTIONS

Programming Languages

- C++, C, Python, Rust, Kotlin, Java, bash

Small projects and skills

- Multithreaded applications (C, C++)
- TCP/IP client and server; POSIX sockets (C, C++)
- Reverse engineering, shared object hooking, code injection (**macOS**, **Linux**, C++)
- Android Apps (**Java**, **Kotlin**)
- Linux Kernel hacking (C, **shell**)

Open-Source contributions

- KDE Plasma
 - Add search and filter UI to KMenuEdit, fixing bug first reported in 2003
- OpenRocket
 - Enable HiDPI support and fix Java 9+ build issues and dependencies
- IntelliJ-Rust
 - Ignore empty parameter hints, create cleaner text editing view

MAJOR PROJECTS

Momentum Mod - An open-source first person speedrunning game

<https://momentum-mod.org>

2015 - 2017

- Programmed game client and internal tools
 - “Replay” system for runs, replay ghosts, translation token decoder/encoder, multiplayer game server, Steamworks API tools,
- Oversaw a growing team of programmers, level designers, and artists
 - Coordinated/managed other team members and assigned work via Trello
- Development with Source game engine: documented and maintained a large legacy codebase written in C++98

OpenBurn / openMotor - Open-source desktop application for designing and simulating solid rocket motors

<https://github.com/tuxxi/OpenBurn-old>

2017 - 2018

<https://github.com/reilleya/openMotor>

2019 - current

- Written in C++14, Qt5 based frontend with MVC architecture
- Modular, reusable design of core simulation API
- Collaboration for rewrite in Python to aid easier contributions from the community

WORK EXPERIENCE

Raytheon Applied Signal Technology

Sunnyvale, CA

Software Engineering Intern

Summer 2019

- Designed new user manual delivery system, wrote custom Markdown parser & HTML renderer
 - Interface with existing version & feature checks to create various outputs from one source document, saving days over old system
- Rewrote legacy build system in CMake for >10x speedup, incremental builds

EDUCATION

UC Santa Cruz

B.S. Computer Science

Santa Cruz, CA

Jun 2021 (Expected)