

TIMO ALEJANDRO ARANJO · 913-286-0701 · alex.aranjo@gmail.com

EDUCATION

- B.S. Computer Science, University of Kansas, 2021 – 2025 **GPA 3.71**
- A.G.S. & A.S., Johnson County Community College, 2018 – 2022 **GPA 3.90**
- Computer Science Academy, Olathe South High School, 2017 – 2021 **GPA 4.0**

EXPERIENCE

LANGUAGES & TECHNOLOGIES

Python · C · ReactJS · Javascript · Bash · Java · C++ · VHDL · Verilog · Linux · Apache · Vim

SELECTED PROJECTS

ReactJS Sales Catalog · [\[Link\]](#) · A tag searchable product catalog organized by books and pages. Frontend is implemented in ReactJS, backend implemented with Python, Flask, and MongoDB (Personal Project).

RoboOpp · [\[Link\]](#) · A robot that shoots intruders with Nerf Bullets. I developed the target detection vision system for the robot in OpenCV and Python. (Hackathon Project, won Best Hardware award)

8 bit CPU · [\[Link\]](#) · An 8-bit Harvard RISC CPU designed in Verilog and deployed on a Tang Nano 20K (Personal Project).

510 RideKC Bus Tracker · [\[Link\]](#) · Created this system to track when the 510 Bus left Edwards Campus, using an ESP32 programmed in C/C++. (Personal Project).

Hosted Personal Server · Used Oracle Free Tier to host website and Minecraft server. Used Jekyll to create website and Apache to serve it. Minecraft server was launched by custom systemd script and was backed up at regular intervals. (Personal Project)

LINUX

Installed and Configured Multiple Linux Distributions · including Ubuntu, Debian, Rocky, Gentoo, Arch, and Void, gaining hands-on experience with various system architectures and package managers.

Manual Software Compilation · Manually compiled software on Linux to extend functionality; for example, built FFmpeg from source to enable support for additional video codecs.

Familiar with Common Utilities · Proficient with common Linux utilities such as tar for file archiving, chroot for system recovery tasks (e.g., bootloader restoration), and vim for text editing and configuration.

Disk Driver Troubleshooting · Resolved legacy PC deadlocks (requiring reboot) during heavy disk I/O by recompiling the kernel with only the generic PATA driver.

Installed Custom Firmware on Router · Unlocked router features by installing OpenWRT (Linux-based firmware); bypassed restrictions by generating a custom checksum to allow installation.

LEADERSHIP

Team Lead for Database Project · [\[Link\]](#) · Used a relaxed tone to foster collaboration. Guided discussion and advised project direction.

Team Lead for Calculator Parser Project · [\[Link\]](#) · Established communication channels to coordinate team efforts. When some members were uncooperative, motivated the remaining team and personally contributed additional time to ensure project completion.

EMPLOYMENT HISTORY

The University of Kansas (Student System Admin)
Lawrence, KS, 66045
2022 – 2023

Overview

Provided IT support at I2S, an independent research facility within KU's Computer Science department. The building operates its own IT department, separate from the main campus, to support specialized research equipment and software.

Responsibilities

- Imaging computers for deployment for new students and professors
- Resolving support tickets from researchers and professors to facilitate their academic and research activities.
- Migration of systems to updated software for improved security

Contributions

- Extended the range of auditorium web cam using a novel approach (USB over IP protocol)
 - Restored data from professor's failing drive using ddrescue and other tools
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Menards (Receiving Team Member)
Olathe, KS, 66062
2019 – 2021

SELECTED COURSEWORK

Embedded Systems · Data Structures & Algorithms · Machine Learning · Digital Systems Design · Cyber Defense · Database Systems · Calculus III · Speaker–Audience Communication