Myles Master

Software Engineer

Objective

I am a highly motivated software engineer with a diverse skill set looking for work. I enjoy learning new concepts and solving obstacles encountered along the way. I am adaptable, I take initiative, and I've had great success working on a team. Outside of work, I enjoy programming, playing guitar, and fishing. Thank you for taking the time to look over my resume.

Contact

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Education

Bachelors in Computer Science

University of Iowa

Iowa City, IA

August 2019 - December 2022

3.62 Cumulative GPA

Relevant Courses:

	Grade
Computer Science I & II	A
Computer Organization	A
Object-Oriented Software Development	A-
Mobile Computing	A-
Programming Language Concepts	A+
Theory of Computation	A

Skills

- General Purpose Application Development
  - C/C++
  - Python
  - Java
  - C#
  - Lua
  - SQLite
- Embedded Development
  - C
  - Arduino
  - Raspberry Pi
  - ESP32/ESP8266 (esp-idf)
- Real-Time Graphics/Compute Application Development
  - C++
  - GLSL
  - Vulkan
  - SDL2/3
- Web Application Development
  - Javascript
  - HTML5
  - CSS
  - Django
  - Gunicorn
  - SQL
  - PostgreSQL
  - Nginx
  - Apache
  - Let's Encrypt
  - Linode
  - AWS

Experience

Software Engineer - Raytheon

April 2023 – January 2025

- Led a small team developing a logging manager written in C++ utilizing concurrency while following company coding practices and creating supporting UML diagrams.
- Designed optimized and maintainable product testing strategies collaborating with technical fellows by developing architecture diagrams, prototype test applications, and prototype embedded software solutions.
- Developed various hardware drivers using both proprietary programming languages and C.
- Contributed to multiple integration efforts of product test systems with varying capabilities and COTS components.
- Implemented Python scripts leveraging proprietary libraries for software validation purposes.
- Effectively adapted to a variety of work environments including work travel, cubicles, laboratories, production lines, and hybrid/remote collaboration.

IT Internship - Link Manufacturing

August 2022 - December 2022

- Developed and maintained a Python GUI application to automate software installations on company assets.
- Co-managed multiple environments for cybersecurity training, remote IT support, and communication solutions.
- Installed network infrastructure and communications systems alongside network administrators.

Skills cont'd

- Mobile Application Development
  - Android Studio
- Development Tools/Process
  - CMake
  - Makefile
  - Ninja
  - GCC, GDB
  - Visual Studio, VSCode
  - Python Virtual Environments
  - Doxygen
  - Git, GitHub
  - Docker
  - Bash Scripting
  - UML/SysML
  - Azure DevOps
- Development Environments
  - Linux (Desktop and Server)
  - Windows (Desktop)
  - VMs, VPNs, SSH
- Hardware Driver Development
- Computer Hardware Knowledge
- Object-Oriented Programming
- Functional Programming
  - Haskell
- Soldering
- Test Equipment
  - Oscilloscope
  - DC Power Supply
  - Multi-meter
- Roofing
  - Shingles
  - Standing Seam Metal Panels
  - Rubber/EPDM
  - Corrugated Steel Panels
  - Hand Tools
  - Power Tools
- Sheet Metal
  - Loading/Unloading Sheets
  - 10ft Air-Powered Shear Operation
  - Step-Shear Operation
  - 10ft Brake Operation
  - Coping, Gravel Stop, Fascia
  - Gutters, Downspout
- Leadership
- Attention to Detail
- Communication

Experience cont'd

Sheet Metal Apprentice - Master Roof Innovations

June 2015 - Present (Seasonal)

- Performed a wide range of architectural sheet metal fabrication and installation applications within both residential and commercial roofing markets.
- Developed a strong work ethic in addition to a broad scope of knowledge relating to small business management and roofing systems.
- Gained valuable customer relationship skills while interacting with both general and subcontractors.

Independent Software Projects

Personal Website(s)

December 2022 – Present

Around the time I graduated, I started developing a self-hosted website on a Raspberry Pi 4 I had bought. Once I had port-forwarded the web traffic to the Pi on my router, I started with a simple static site using Apache. Later, I switched to Django (Python) framework in order to create a blog and a portfolio. This first iteration of the site did not last long; once I moved to Tucson, my ISP blocked web traffic. I settled on using Linode to host my website, and have restarted the project a couple of times over the years. I am going for a 3D theme (using three.js) at the moment, and the website just contains a simple blog and about page. You can visit this site at: https://eternalnerds.com

Additionally, I am developing websites for a few friends and family members, but these sites are not up yet.

3D Game Engine using the Vulkan API

November 2023 – Present

Computer graphics have always amazed me, so I decided to start developing a simple 3D game. I took a low-level approach by learning Vulkan along with SDL3. These C APIs were challenging to use initially (mainly Vulkan). Semaphores, fences, descriptor sets, memory-mapped vertex buffers, vertex/fragment shaders, graphics queues, present queues, and more were all new concepts to me. After about 1 year of learning, I finally had created a C++ program that has some resemblance to a video game.

Currently, my program can (among other things):

- Load and manage mesh, texture, and audio files
- Render a dynamic 3D scene
- Handle and respond to user input (FPS camera, movement, etc.)
- Display a 2D overlay running on a separate graphics pipeline, capable of dynamic text and elements
- Use configuration files to save the state of the program between runs

I am super excited about this project, and it is ongoing. Feel free to check it out at: https://github.com/Eternal-nerd/FREAKY_3D

Electronics Projects

January 2025 – Present

Who doesn't like gadgets? My interest in embedded software has been growing ever since I got to work in hardware labs at Raytheon. Other than a simple Raspberry Pi computer vision project I completed in college, I do not have much experience with hardware. This year, that is changing. I have started experimenting with a variety of ESP32 dev-boards I found for cheap and having a blast in the process. These C projects can also be found on my GitHub.