2095F Lake Park DR SE Cell: +1 (832) 517-7130 Smyrna, GA 30080 Email: duffiesean@gmail.com

OBJECTIVE

Seeking a Full-Time position in the field of Software Engineering with an Embedded background. I currently hold an active Secret-level Security Clearance.

EXPERIENCE

Georgia Tech Research Institute, Smyrna, Georgia

January 2024 – Present

Software Research Engineer I

- Hold a Secret-level Security Clearance while analyzing software binaries.
- Designed software/plugins to interpret hardware protocols and RF comms using tools like Wireshark or Saleae Logic.
- Analyzed software and firmware using Ghidra and IDA Pro.

Lynntech inc., College Station, Texas

September 2021 – January 2024

Embedded Software Engineer

- Lead a team of ~8 people to construct a database and media tagging system for our training data.
- Worked with OpenCV to identify/recognize various objects including faces.
- Worked with Android Studio to make an app on an RFID Reader.
- Reorganized the company's policies on Git Project Management.

Embedded Engineering Technician

- Designed and assembled custom PCB boards for company projects using Altium Designer.
- Worked with OpenCV and Pygame to develop an image processing software with a fast, multithreaded GUI.
- Worked with MAGMA and CUDA to develop an algorithm to run on a multi-GPU system.

12th Man Technologies, College Station, Texas

May 2021 – September 2021

Student Ambassador

Diagnosed and documented issues with laptops that were checked in to us for repair or maintenance.

EDUCATION

Georgia Institute of Technology, Atlanta, Georgia

August 2025 - Present

Degree: Masters of Computer Science (In Progress)

Texas A&M University, College Station, Texas

August 2018 - May 2023

Degree: Bachelor of Science in Electronic Systems Engineering Minors – Computer Science, Cyber Security

SKILLS

Software Experience:

- Most personal projects have been done in Python; most work projects have been done in C/C++ or Assembly.
- Leadership experience with Git Project Management and CI/CO.
- Extensive experience with OpenCV and Image Processing.
- Magma multi-GPU processing, multiprocessing/threading.
- Designed various UI using Qt, Pygame, uGFX, or Flask/JS/CSS.

Hardware Experience:

- PCB Design on Altium. Soldering and assembling boards in-house.
- Debugging Hardware connections with an oscilloscope, Saleae, or Wireshark.

ACTIVITIES

Aggie Coding Club August 2018 – May 2021

Project Team Member

Boy Scouts of America 2005 – 2018

Eagle Scout

• Experience in leadership positions including Patrol Leader, Historian, Quartermaster, and Master of Ceremony.

Personal Projects

- Capstone Role: Software Lead, designed a portable and budget-friendly embedded device to monitor local storm data.
- Designed custom PCB for an ESP32 Wi-Fi chip to integrate non-smart devices with IoT capabilities.
- Built a Flask server on a Raspberry Pi home server to conveniently control all of the devices from the above project.
- Automated Gardening system using microcontrollers with data collection for research under different conditions.
- See more detailed examples and descriptions on my GitHub page: (https://github.com/SeanDuffie)