Austin "Lane" Turner

(757)-323-0324 | lane.turner1628@gmail.com

Education

• University of Virginia - B.S. in Computer Engineering | Cumulative GPA: 3.692

2018 - 2022

Work Experience

Software Engineer II - Alarm.com

2022 - Present

- Project Lead Engineer
 - Currently leading project that provides the ability for seamless hardware transitions when consumer upgrades their system
 - o Architected High and Low Level Designs and facilitated reviews
- Implemented second phase of revamping legacy initialization flow for users
 - Designed and code reviewed third phase
 - Extensively utilized object-oriented C# and SQL
- Supported release of extended range functionality for consumer end devices
- Integrated Wavefront throughout systems for better analysis of features in production
 - Number of successes, failures, type of failure, processing time, etc.
 - Work resulted in better metric tracking and system analysis/performance through error recognition
- Led onboarding for new hires, provided technical insight through code reviews, pair programming sessions, and one-on-one mentorship

Computer Engineering Intern - *General Atomics (Electromagnetic Systems)*

2021

- Used Java to develop a parser for translating between formatting languages
- Developed an embedded system using Arduino and C to interface with external sensors for equipment tilt control

Academic Projects

Automated Launcher | Academic Capstone - University of Virginia

2021

- Implemented a functioning dog ball launcher that rotated 180 degrees and had multiple launch speeds
- Leveraged motors, servos, an MSP432 microcontroller and other products to create an embedded system
- Produced microcontroller code in C to operate the system using Code Composer Studio as the IDE

EKG System | ECE Fundamentals - *University of Virginia*

2020

- Developed a functioning EKG system that was built on a PCB board for testing and analysis
- Leader for team of three to design the system with MATLAB and circuitry analysis

Robot Line Follower | Embedded Computing and Robotics - University of Virginia

2020

- Constructed a robot that fully followed a line using Texas Instruments equipment
- Wrote code in embedded C to program each individual piece of the robot using concepts like a finite state machine, timers, interrupts, clocks and input/output data

Relevant Experiences

Certified Scrum Master - *KnowledgeHut*

2024

• Learned industry best practices regarding scrum and agile processes

President | Men's Club Volleyball - University of Virginia

2019 - 2022

- Captained a team of 27 players, managing finances, scheduling, and logistics
- Organized practices, tournaments, and tryouts, fostering team culture of dedication and performance

Technical Skills

- **Programming languages:** C#, SQL, Java, Python, Embedded C, MATLAB, Wavefront Query Language, shell scripting
- Tools and IDE's: JIRA, Bitbucket, Confluence, Rider, Visual Studio, Visual Studio Code, Eclipse, PyCharm, Code Composer Studio, VirtualBox, GitHub
- **Hardware/Systems:** Circuitry and electronics such as filters, amplifiers, peak detectors, Virtual Bench hardware, Analog Discovery Two, Texas Instruments products and soldering

Personal Projects: Constructed Arduino G-Force Sensor (for my car), built Arduino Light-Up Christmas Tree (for a present), developed my website (for me)