Dylan J. McCoy

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EDUCATION

The University of Texas at Austin Bachelor of Science in Electrical and Computer Engineering Honors May 2021
GPA: 4.00

Related Courses: Operating Systems, Enterprise Network Security, Data Science Lab Algorithms, Data Structures

WORK EXPERIENCE

Software Engineer Intern, Qualcomm June 2019 – August 2019

- Designed, developed, and presented a testing framework in C++ to assist with regression testing and future development of TLS security protocol code
- Assisted IWLAN team to increase flexibility in device configuration with multiple Mobile Network Operators
- Worked to integrate newly acquired x509 and TLS modules into the codebase

Software Engineer Intern, MagnetoSpeed LLC May 2018 – August 2018

- Diagnosed inefficiencies in chronograph and implemented an algorithm reducing velocity calculation error to ±0.1%
- Updated code and designed a device improving product testing efficiency by over 50%
- Fulfilled consumer requests for a wireless chronograph by implementing Bluetooth Low Energy functionality

Undergraduate Teaching Assistant, UT Austin August 2018 – May 2019

- EE 306, *Intro to Computing,* and EE 319K, *Embedded Systems*
- Led recitation lectures for classes of 30+ students
- Collaborated with a team of faculty at weekly meeting and actively contributed new ideas on teaching

PERSONAL PROJECTS

Chat Room March 2019 – April 2019

- Multi-threaded chat room application with direct message and group chat functionality
- Utilized behavioral design pattern to identify communication patterns and develop application
- Used socket programming and followed TCP/IP to transmit information over the network

Pokemon Showdown April 2018 – May 2018

- A multiplayer turn based fighting game involving many unique Pokemon and attacks
- Developed, iterated, and demoed the game over a span of two weeks, placing in the top 5 in the course
- Created a physical console to play on with multiple inputs, sound output, and a display

Arduino Programming Project October 2017 – December 2017

- Explored and refined microcontroller programming to navigate mazes utilizing optic and haptic sensors
- Iterated over several program solutions, improving testing and debugging methods
- Designed, coded, and installed navigation and obstacle avoidance programs

LEADERSHIP EXPERIENCE

Communications Officer, Institute of Electrical and Electronics Engineers October 2017 – May 2018

- Managed and maintained social media presence through IEEE website and Facebook page
- Facilitated communication between the organization and over 200 members
- Created opportunities for members to interact with companies in a professional environment

TECHNICAL SKILLS

Languages Python, Java, C++, C, ARM Assembly
Web Development HTML/CSS

INTERESTS AND ACTIVITIES

Volunteer: The Cavaliers Drum and Bugle Corps, Texas Children's Baptist Home, McNeil High School Band, National Honor Society, Bands of America
Interests: Cooking, Sushi, Drum Corps International, Trumpet, Ultimate Frisbee, Volleyball, Swimming