MICHAEL ORSCHELN

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EDUCATION

University of Alabama — Tuscaloosa, AL
Bachelor of Science in Computer Engineering
Minors: *Mathematics, Computer Science & Spanish*

UA Honors College
GPA: 3.0/4.0
Expected Graduation: December 2024

PROFESSIONAL EXPERIENCE

Digital Forensic Intern May 2023 – August 2023
Repario — *Remote*

- Analyzed digital evidence, from various devices including 9 different forensic tools, for contribution in litigation
- Delivered 2 forensic examination reports for use as admissible evidence in court
- Automated the processing of 1030 GB of forensic data to improve eDiscovery throughput
- Collected and or prepared 4776.32 GB of data for delivery to attorneys

Project Management Intern June 2022 – August 2022
SALTO Systems — *Oiartzun, Gipuzkoa, Spain*

- Discovered 3 Apple Wallet cross functional pain points for project prioritization and presented revised product roadmap to the Product Manager
- Designed onboarding courses delivered to 64 global business units reducing onboard load by 45%
- Supported cross-functional team collaboration for integration of 3 different product lines, working closely with technical managers from SALTO and Apple Inc.

Associate Intern May 2021 – June 2021
Charter Capital Management, Inc. — *Boston, MA*

- Developed fully responsive website with analytical tools resulting in a 152% increase in organic search traffic
- Evaluated real estate investment projects using comparative and cash flow analysis supporting 10 acquisitions with total valuation of $233 million
- Reduced market research workload for residential property acquisitions by 75%

PROJECT EXPERIENCE

Localization Subsystem Lead — *IEEE SoutheastCon Hardware Competition* August 2023 – March 2024

- Engineered fully autonomous robot with the ability to complete a series of tasks to send supplies to space
- Worked closely alongside 5 team members to integrate the drive train, power, and edge computing subsystems to be used in Robot Operating System (ROS)
- Implemented gyroscope and accelerometer sensor with NVIDIA Jetson Nano system using mathematical models for data accuracy within 1 degree for all 3 dimensions (yaw, pitch, roll)

Embedded Light Intensity System — *Microcomputers* November 2022 – December 2022

- Programmed PIC24 microcontroller to sample analog voltage inputs from a photocell every 50 milliseconds, using a 32-bit timer-driven interrupt to control input sampling and 8-bit light intensity variable

EcoCAR — *University of Alabama* November 2020 – April 2021

- Utilized MATLAB and Simulink to simulate energy efficiency of the team's modified 2019 Chevy Blazer
- Designed energy consumption plan to test 4 drive cycle variations and proposed strategy to technical team leads

SKILLS

Proficiencies: C++, C, Assembly, Java, Python, Javascript, Typescript, HTML, CSS, MATLAB, Verilog, VHDL Object-Oriented Programming, Cadence OrCAD, FPGA, ROS, Git, Jira, Microsoft Office (Word, Excel, PowerPoint), Adobe Photoshop
Frameworks: React, Chakra-UI, NextJS, TailwindCSS
Languages: English, Spanish
OS: MacOS, iOS, Windows, Linux, Unix, KaliLinux
Other: Computer Architecture, Digital Systems Design, Agile Development, Visual Studio Code

ADDITIONAL INFORMATION

Honors: President's List, UA Scholar
Leadership: UA Men's Club Soccer Team Captain
Interests: Soccer, Football, Music Production, Neuroscience, Sigma Phi Epsilon Fraternity