EVAN PATRICK

Looking for Software Engineering Internship, Summer 2020

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EXPERIENCE

UBER ATG

Software Engineering Intern

May 2019 – August 2019 Pittsburgh, PA

- Designed and implemented system on autonomous vehicle to communicate between the main software stack and failsafe device in order to minimize bandwidth usage.
- Implemented a highly efficient and reliable linear algebra library in C. This project is a fundamental dependency for vehicle pose estimation.

CUAIR | UNMANNED AIR SYSTEMS

Platform Systems Lead

September 2017 – Present Ithaca, NY

- Leader of project team that creates autonomous fixed winged aircraft capable of waypoint navigation and ground target detection.
- Lead subteam responsible for autonomous image acquisition and management. Teaching and utilizing HTTP requests, interprocess comms, and frontend/backend development.

SCALOG

Distributed Systems Researcher

January 2020 – Present Ithaca, NY

- Researcher for a high-throughput, fault-tolerant, distributed log system using Paxos and sharded stores.
- Utilizes Golang and Protobufs to maximize throughput and minimize latency

PHIZZLE INC.

Software Engineering Intern

June 2016 – August 2018 New York, NY

- Developed high performance IoT edge computing solution to generate C++ code based on a JSON rule set.
- Resulted in ∼90% fewer computations when compared to the company's previous solution.

TECHNICAL SKILLS

Programming

Java | Python | C/C++ | Golang | C# | NodeJS | Verilog | LaTeX | Kotlin | JavaScript | HTML | CSS

Frameworks/Tools

Git | Linux | Protobuf | Docker | Docker Compose | ROS | TravisCI | Numpy | TCP/UDP

EDUCATION

B.S. Computer Science
Robotics and Business Minor

Cornell University

Expected May 2021 Ithaca, NY

- GPA: 3.86 / 4.0
- Dean's List: All semesters

PROJECTS

AMAZEBALL

- Embedded system with custom GPIO and I2C drivers that interfaces with an LED matrix and an IMU to play a maze game by tilting the board.

GAZEBO ROBOT

- Controlled a simulated robot to perform various tasks with ROS. Utilized Markov decision processes, inverse kinematics, path planning and pure pursuit path following.

GAME LOBBY

- Ocaml library that runs an AI against an arbitrary board game. Uses Monte Carlo tree search as it's core algorithm.

COURSEWORK

Past Coursework

- CS 2112 – Honors Data Structures **TA, A+**
- CS 5414 – Distributed Systems **A**
- CS 3110 – Functional Programming **TA**
- CS 4820 – Algorithms **A**
- CS 3420 – Embedded Systems **A+**
- CS 6770 – Graduate Computer Vision **A+**
- CS 4750 – Foundations of Robotics

Current Coursework

- CS 6110 – Graduate Programming Languages
- CS 4410 – Operating Systems
- CS 4450 – Computer Networks

AWARDS

MOST POPULAR TEACHING ASSISTANT

- Voted most popular teaching assistant for CS 3110 in Spring 2019

ASSET SPONSORSHIP WINNER

- Winner of $2,000 award for passionate STEM highschool students. Sponsorship luncheon attended by my superintendent.