Michael Ryan

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EDUCATION

Georgia Institute of Technology - Atlanta, GA

AUGUST 2019 - MAY 2023

- Bachelor of Science in Computer Science
- Concentrations: Artificial Intelligence and Systems/Architecture
- Current GPA: 4.0/4.0

Cherry Hill High School East - Cherry Hill, NJ

SEPTEMBER 2015 - JUNE 2019

- Weighted GPA: 7.0/7.0
- National AP Scholar and AP Capstone Diploma

WORK EXPERIENCE

Uber Technologies, Inc., Virtual - *Software Engineer Intern*

MAY 2020 - AUGUST 2020

- Implemented end-to-end testing service in GoLang for bike, scooter, and moped rentals using virtual vehicles.
- Built a simulated 3rd party CRUD API to interface with micromobility backend architecture over HTTP.

Automation Intelligence, Atlanta, GA - *Intern*

OCTOBER 2019 - MARCH 2020

- Simulated factory environments using C# & Emulate3D platform.
- Analyzed client production output using digital twins.

J&J Snack Foods Corp, Pennsauken, NJ - *Internet of Things Intern*

JULY 2019

- Designed a portable internet of things (IoT) temperature monitoring device using Microsoft Azure and Arduino.
- Modeled a 3D printed case for the device in Autodesk Fusion 360.
- Documented all design processes for future engineers in Markdown to facilitate integration of device into the factory.

Code Ninjas, Cherry Hill, NJ - *Assistant Manager/Lead Sensei*

MAY 2018 - JUNE 2019

- Guided 133 (cumulative) elementary and middle school students in programming with either Scratch or Javascript.
- Scheduled shifts for 19 staff members weekly.
- Developed introductory trial lesson for new programmers.

RESEARCH EXPERIENCE

Facial Composite Generation from Natural Language Text Descriptions using Stacked Generative Adversarial Networks

SEPTEMBER 2018 - APRIL 2019 | AP Research

- Integrated natural language processing and generative adversarial networks to generate images of faces from text descriptions using Lua/Torch and Python/Pytorch.
- Reviewed by The College Board and received a 5/5 score.

Cloud Computed Machine Learning Based Real-Time Litter Detection using Micro-UAV Surveillance

JULY 2018 | Rutgers University, NJ Governor's School of Engineering and Technology

- Integrated various machine learning algorithms to design an ensemble method for detecting litter from drone footage using Python and the Tensorflow ML framework.
- Presented at MIT IEEE Undergraduate Research Conference.

SKILLS

PROGRAMMING

- Python
  - Machine Learning, PyTorch, Tensorflow, OpenCV, Flask
- GoLang
  - Fx, Microservices
- Java
  - Swing Applications
- JavaScript
  - React, NextJS, NodeJS, Gatsby
- C
  - Robotics, Microcontrollers
- Arduino
- HTML & CSS

FOREIGN LANGUAGE

- Spanish
  - NJ Seal of Biliteracy

PROJECTS

Miqueas6.8 Inventory Solution

Programmed React frontend of a web app for managing inventory of a 39 child orphanage in Honduras.

LED Lightstrip

Implemented Flask backend API over HTTP for LED Light control and Spotify API integration. Developed React Frontend to enable user control. Served on Raspberry Pi.

ACTIVITIES

Bits of Good

Junior Developer (Spring 2020-PRESENT)

Developing web applications using NextJS and React for non-profit partners. Interviewing applicants.

GT Honors Program

Member (Fall 2019-PRESENT)

Guiding and mentoring incoming students at Georgia Tech. Completing honors level classes.

RELEVANT COURSEWORK

- Data Structures and Algorithms
- Introduction to Artificial Intelligence
- Machine Learning
- Objects and Design
- Computer Organization and Programming