

Oliver Hill Resume

EDUCATION

University of Michigan

Masters of Science in Data Science

April 2021

Research: Identifying, characterizing, generating, and predicting ecological networks and network assembly with ML.

BSE in Computer Science and Engineering

April 2019

SKILLS

Languages and Applications

Proficient in: Python, C++, C, Julia, Matlab, SQL, MongoDB, Git, Kafka, Tensorflow, SKLearn.

Experience in: R, Javascript, C#, Scala, Docker, Kubernetes, AWS, Azure, NGINX, QGIS.

EXPERIENCE

Michigan Aerospace Corporation

Data Scientist, Machine Learning Engineer, Lead Software Engineer

April 2017 – October 2020

- Researched and developed a deep learning system alongside Markov-Chain Monte Carlo methods to identify and predict invasive species population distributions in aerial drone imagery of wildlife preserves.
- Managed a software team in developing a web application from the ground to production to allow scientists and land managers to upload and analyze heterogeneous datasets through a suite of neural networks.
- Researched reinforcement learning algorithms for teaching a robot to walk.
- Researched the use of generative adversarial networks in enhancing cone-beam CT scan imagery.
- Consulted on company-wide software architecture decisions, including a highly latency-sensitive LiDAR system.
- Designed a variety of hardware and software solutions to ambiguously defined goals and projects through many rounds of use-case study and business requirement investigation.

Arboreal AI

Data Scientist, Chief Software Architect

April 2018 - Present

- Researched and developed supervised and unsupervised learning strategies for sentiment analysis and categorization of restaurant reviews.
- Researched the estimation of wait times for customers in restaurant queues, resulting in predictions nearly four times more accurate than human estimates.

University of Michigan

Graduate Student Instructor

August 2017 - Present

- Helped thousands of students with designing, building, and testing programming projects.
- Planned and led weekly lab sessions consisting of course material, software tools, and code optimization tips.
- Collaborated daily with other staff members to plan and provoke learning outcomes for students.

Microsoft

Software Engineer Intern

May 2018 – August 2018

- Designed and developed a distributed packet capturing system on Azure, Microsoft's cloud computing architecture, with a small team.
- Worked with a team to design a solution to highly latency-sensitive data streaming using Internet Group Management Protocol.

LEADERSHIP

Neutral Zone

Zone Hacks Mentor/Teacher

December 2016 – March 2020

- Worked one-on-one with high school students to determine and develop unique programming projects.
- Attempted to diversify the demographics of students interested in computers through community outreach.