

# Oliver Hill Resume

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1801 Chandler Road  
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## 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.