

Education

Princeton University

Sep 2014 - June 2018

Major: Computer Science B.S.E

Courses: Algorithms & Data Structures, Machine Learning (ML), Computer Vision,
Operating Systems, Systems Neuroscience.

Experience

MedStar Health Research Institute. Washington, D.C.

July 2016 - Aug 2016

Software & ML Engineer intern

- Applied Machine Learning models to the analysis of eye-tracking data.
- Developed an internal website for detecting the similarities between the names of different medications.

Princeton Neuroscience Institute, Berry Lab. Princeton, NJ

June 2015 - Oct 2016

Lab intern

- Analyzed scientific data using MATLAB, looking for evidence in support of a specific model.
- Gave presentations on scientific papers and literature reviews.

Princeton University, Lewis Science Library. Princeton, NJ

Feb 2015 - June 2018

Library assistant

- Log books using the Voyager circulation program and assist patrons.

Skills

Programming Languages: Python, C++, C, C#, Java, MATLAB, JavaScript, HTML, CSS, SQL.

Libraries: Tensorflow, PyTorch, Keras, OpenCV, Numpy, Pandas, Scikit-learn, NLTK.

Tools: AWS, Unity3D, Linux, Git.

Projects

3D reconstruction with Neural Networks

- My Senior Thesis, a year long independent project done in my final year, which involved the implementation and training of a neural network capable of 3D reconstruction.
- <https://github.com/micmelesse/3D-reconstruction-with-neural-networks>

Unity3D AI and Procedural Generation Framework.

- A framework of AI agents that could navigate procedurally generated environments in the Unity3D Engine. Lead the 4 person group and was involved in the development of the vision system for the various agents.
- <https://github.com/Donut-Studios/Unity3D-AI-and-Procedural-Generation-Framework>

Volunteering

Contact Crisis Hot Line

Feb 2015 - June 2018

Project manager, assistant trainer, volunteer

- Take calls and chat messages from people suffering from mental health issues, Assist with the training and recruitment of volunteers.

Honors, Awards, and Accomplishments

- CONTACT 2017 Volunteer Spotlight Award