

## EDUCATION:

**M.Eng Computer Science @ Cornell Tech**

August 18' - May 19'

**B.S. Computer Science (Music Minor) @ Cornell University**

August 14' - May 18'

## COURSES:

Startup Studio • Data Science in the Wild • Advanced Topics in Machine Learning • Machine Learning for Intelligent Systems • Machine Learning for Data Science • Computer Vision • Analysis of Algorithms • Data Structures • Object Oriented Programming • Functional Programming • Discrete Mathematics • Digital Logic • Linear Algebra • Data-Driven Web Applications

## TECHNICAL SKILLS:

Python • Numpy / Pandas • PyTorch • HTML/CSS/JS/D3 • Arduino • Processing • Grasshopper • Rhino • Carto • SQL • Spark • Java • C

## EMPLOYMENT:

### • **Research Associate | Jenny Sabin Design Lab**

Worked on a software project called RoboSense that enables architects to easily design and use intelligent Arduino controlled end effectors for 6 axis robots in Grasshopper and Rhino. Co-authored two papers that were accepted to SimAUD 2016 and Acadia 2018.

June 16' - June 18'

### • **Machine Learning Intern | Autodesk**

Implemented a variational autoencoder to encode Generative Design shapes as vector representations to calculate similarity and cluster 3D generated models. Utilized traditional computer vision techniques for shape vector representation. Researched a 3D model recommendation system.

June 17' - August 17'

## PUBLICATIONS:

### • **Robosense 2.0: Robotic Sensing and Architectural Ceramic Fabrication | Acadia 2018**

Student scholarship award recipient.

October 18'

### • **Matrix Architecture: 3D-Printed and Simulated Kirigami Matrices & Auxetic Materials | SimAUD 2017**

May 17'

## PROJECTS:

### • **Urban Planning Startup Studio | Cornell Tech**

I am working on a startup in Cornell Tech Studio that is using data to drive better city planning.

Jan 19' - Present

### • **Image Captioning Machine Learning Research | Cornell University**

I worked on a research project to improve image captioning by implementing a loss function that computes semantic similarity between captions using Word Movers Distance. We were advised by Kilian Weinberger.

August 17' - May 18'

## ORGANIZATIONS:

### • **Survival Skills Instructor | Cornell Outdoor Education**

Lead students backpacking and wilderness survival trips in the Finger Lakes Region. Teach students risk management, leadership, group dynamics and how to have fun outdoors!

January 17' - May 18'

### • **Alto II | Cornell Jazz Ensemble**

Perform in two big band jazz shows a year.

August 16' - May 18'

### • **National Outdoor Leadership School**

Completed a month long backpacking trip in the Talkeetna Mountains of Alaska. Learned leadership skills and interpersonal skills.

Jun 15' - Jul 15'