

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

August 18' - May 19'

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

August 14' - May 18'

**TECHNICAL SKILLS:** Python • Pandas • scikit-learn • Docker • postgis • Geospatial python • GCP • PyTorch • streamlit • QGIS**EMPLOYMENT:****• Data Engineer | Catalyst**

August 21' - Present

Catalyst created and maintains an open source data pipeline that automatically cleans, integrates, validates, and publishes US energy data for climate advocates, researchers and journalists.

**• Data Scientist | Envelope**

June 19' - August 19'

Envelope combines predictive analytics with the most accurate 3D modeling of zoning laws to identify land acquisition opportunities. I create models to value buildings, understand ownership networks, and analyze market changes.

**• Data Engineer | Department Of City Planning NYC**

June 16' - June 18'

Worked on the ETL of NYC public datasets including the city's parcel, facility and environmental review datasets. I also volunteered at planning community hearings.

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

June 17' - August 17'

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.

**• Machine Learning Engineer | 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.

October 18'

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

May 17'

Presented the paper in Mexico City and received a Student scholarship award.

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

August 20' - Present

**PROJECTS:****• NYC Affordable Opportunity**

August 17' - May 18'

A project analyzing the distribution of new affordable units in areas of opportunity in NYC. Only a quarter of new affordable units built since 2014 in NYC are in moderate to very high economic opportunity tracts.

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

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

**Other Things:**Housing Data Coalition, Climbing, Music (Saxophone, Keyboard, Guitar), Making Things. **Recent Books:** All We Can Save, The Ministry For the Future, Rewiring America, The Color of Law