# Bennett Dell Norman

#### EDUCATION:

M.Eng Computer Science @ Cornell Tech

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

August 18' - May 19' 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

<u>TECHNICAL SKILLS</u>: Python • Pandas • Sklearn • SQL • PyTorch • HTML/CSS/JS/D3 • Arduino • Processing • Grasshopper • Rhino • Carto • Spark • Java • C

### **EMPLOYMENT:**

• Data Scientist | Envelope

July 19' - Present

Envelope combines predictive analytics with the most accurate 3D modeling of zoning laws to identify land acquisition opportunities. I create models to predict and understand real estate price and demographic changes of cities.

• Data Engineering Intern | Department Of City Planning NYC
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.

June 19' - August 19'

• 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

October 18'

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

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

May 17'

### PROJECTS:

• Urban Planning Startup Studio | Cornell Tech

Jan 19' - May 19'

Our company Collate provides realestate developers fast and robust socio economic analysis of their building projects. Large building projects in NYC must produce a report on how their project will impact the socioeconomics of the neighborhood. Producing this report can take up to a year and cost a million dollars.

August 17' - May 18'

• 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.

### ORGANIZATIONS:

Cornell Outdoor Education, Cornell Jazz Ensemble, National Outdoor Leadership School