

Education

BS Statistics (Minor: Computer Science), Cornell University
Degree anticipated December 2022
Cumulative GPA: 3.4

Coursework

| Statistics I | Statistics II | Probability Models and Inference | Mathematical Statistics | Calculus I | Calculus II | Calculus III |
Linear Algebra | Stochastic Processes | Intro to Python Computing | Unix Scripting | Object Oriented Programming and Data
Structures | Discrete Structures | Intro to Machine Learning | Statistical Computing | Metabarcoding Informatics | Physics I |
General Chemistry I | General Chemistry II | Database Systems |

Technical Skills

Languages: Python, R, JavaScript, Java, HTML, CSS, SQLite
Packages: NumPy, Pandas, Matplotlib, TensorFlow, sklearn, jQuery, AJAX, D3JS
Tools: Django, Flask, Jupyter, Eclipse, Linux, Git, Visual Studio, R Markdown, R Studio

Research and Professional Experience

Tokyo Electron Enterprises – Modeling and Artificial Intelligence Team

Data Modeling Intern (May 2021- December 2021)

- Prepared and Executed Global Model Simulation Tools in Linux Terminal and Jupyter Notebook
- Improved Global Simulation Automatic Output Software by making plotting feature interactive using Jupyter widgets and matplotlib, pandas, NumPy libraries
- Evaluated internal Machine Learning Software using ANOVA, Monte Carlo Cross Validation (MCCV). Compared models against sci-kit learn algorithms

MIT Sustainability and Health Initiative for a NetPositive Enterprise (SHINE)

Full-Stack Development and Business Intern (May 2020- August 2020)

- Integrated Front-end with Back-end for an interactive Life Cycle Assessment (LCA) Calculator, easing the use of standardized databases for business with standard economic data; used Django framework, python, REST, JavaScript, HTML and CSS
 - Introduced the LCA calculator to several startups looking to calculate their emissions footprint and targeted parts of their business where emissions could be most effectively cut
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Statistical and Computer Science Projects

Stack Cup Simulator

- Modeled the popular college game 'Stack Cup' as a Discrete-Time Markov Chain (DTMC) in python. Implemented different player strategies and analyzed outcomes using Monte Carlo Simulation
- Currently Developing Full-Stack web application using Python Flask, JavaScript, HTML, CSS and NumPy, pandas, jQuery, networkx libraries

Covid-19 Hospitalization Prediction (CS 4780)

- Machine Learning Final Project: Predicted Covid-19 Hospitalization rates using NumPy, pandas, sklearn. Implemented K-Nearest Neighbors, Linear Regression, and Neural Network Classifier (Finished 21st out of 80 Teams)

SHINE Emission Calculator

- Integrated user friendly Front-end with Back-end by learning JavaScript, HTML, CSS languages, Django Framework and D3JS, jQuery, python, pandas, NumPy libraries
 - Tested UX, interface with startups with interest in cutting carbon emission costs; took feedback and further refined input/output flow
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Interests: Baseball, Soccer, Reading, Hiking, Music