Thomas **Huang**

☐ (+1) 847-975-6143 | ✉ thomashuang02@gmail.com | ⌨ thomashuang02 | in thomashuang02

Education

New York University   *Sep 2019 - May 2022 (Expected)*
Bachelor of Arts in Computer Science and Economics   *New York, NY*

- GPA: 3.965/4.000
- CS Courses: Data Structures, Computer Systems Organization, Operating Systems, Basic Algorithms, Linear Algebra, Statistics
  In progress: Applied Internet Technology, Agile Software Engineering, Data Management and Analysis
- Econ Courses: Microeconomic Analysis, Macroeconomic Analysis, Intro to Econometrics, Money & Banking

iXperience   *July 2021 - Aug 2021*
Intro to Data Science Course   *Cape Town, South Africa (remote)*

- Six-week crash course on data science fundamentals and techniques.
- Basics of data wrangling, feature engineering, linear/logistic regression, PCA, clustering, decision trees/ensembles, support vector machines, natural language processing, and neural networks.
- Libraries used include numpy, pandas, seaborn, scikit-learn and keras.

Skills

Languages   Python, Javascript, HTML/CSS, Java, SQL, C
Programming   Agile/Scrum framework, OOP, dynamic programming, unit/integration testing with Mocha and Chai, CI/CD
Web/Database   node.js, Express.js, React.js, Handlebars.js, MongoDB, PostgreSQL
Data Science   data wrangling/analytics, numpy, pandas, seaborn, predictive modeling with scikit-learn, neural networks
Other Tech   Git and GitHub, VSCode, Jupyter, Eclipse, Vim, Linux, MS Word/Excel/PowerPoint, OBS, FL Studio 12

Experience

DataProphet   *July 2021 - Aug 2021*
DETECT Data Science Intern   *Cape Town, South Africa (remote)*

- DETECT project to detect anomalies in industrial-manufacturing machines.
- Preprocessed multivariate time-series data in Python.
- Researched various neural networks on sample data for unsupervised learning (VAE, CVAE, CycleGAN, TadGAN).
- Developed LSTM autoencoder in Keras for time-series anomaly detection with hyperparameters and visualized reconstructions.
- Maintained/versioned code, researched future improvement of LSTM AE model using adversarial critic networks.

Projects

All In Poker Ongoing. Agile/Scrum team project to build a real-time poker web app. React front end, Express as a back-end proxy, database hosted on MongoDB Atlas, deployment to Digital Ocean Droplet. Currently in the process of CI/CD and deployment.

Showstop November 2021. A film- and TV-cataloging web app for users to store, modify, and sort lists of the various shows and movies they've watched, along with details like watching progress, ratings, and notes. Deployed at https://showstop.herokuapp.com/.

Personal Website October 2021. A website by and about me, hosted at https://platypus.house and served on Github Pages. Contains an expanding catalog of my information, projects, and hobbies.

COVID-19 Vaccination Data Analysis July 2021. Cleaned and enriched public global vaccination data with geographical/regional data in Python. Explored and visualized various dimensions of the data (type, quantity, and percentage of population) by country and continent, and made projections for when major countries would reach certain vaccination thresholds using FBProphet.

Course Registration System Software   February 2020. Designed a university course registration system in Java that allows creation, deletion, and manipulation of course and user-login information. Supports serialization to save and reload data.