PAT STEFANOU

stefanou@mit.edu | (203) 912-2909

EDUCATION

Massachusetts Institute of Technology | Cambridge, MA

M.S. in Computer Science, *Candidate for June 2021*
B.S. in Computer Science, *Candidate for June 2020* | GPA: 4.4/5

WORK EXPERIENCE

NASDAQ Innovation Lab | Boston, MA | Summer 2019
Software Engineer – JavaScript, React, Redux, D3, Python, Flask
- Worked with four developers and a product manager to prototype a full-stack web application for monitoring fraudulent economic activity in sports betting markets
- Designed and implemented app's frontend with a React, Redux framework
- Devised relational database schema and brainstormed machine learning techniques for alert system and match analysis
- Developed data visualizations to analyze odd movement during a match
- Participated in and lead daily stand-ups to share application progress and troubleshoot road-blocks
- Presented project and gave application demonstration to company's CEO, CFO, CTO, and marketing teams
- Worked with Chief Data Scientist to design a web crawler, data acquisition tool that leverages NLP to interpret and normalize a web page's content
- Wrote Python web scrapers to collect training data
- Assembled full-stack Python web tool with React, Redux frontend and Python Flask backend
- Coded web crawler to scan web pages for URLs related to specific keywords

LiveData Utilities | Cambridge, MA | January 2019
Software Engineer – Python, Influx DB, Pandas
- Designed and deployed Python software to automate a Random Forest Regression model that estimates a community's electrical consumption based on weather and datetime
- Wrote Python script to retrieve real-time weather forecasts for twelve different communities
- Stored model data and model results in Influx DB time series database for future RFR updates and prediction analysis
- Cleansed and aggregated Pandas DataFrames with RFR input data

SendFriend | Cambridge, MA | Spring and Summer 2018
Developer – JavaScript, React, Redux, Python, AWS
- Built user interface with a React, Redux framework
- Wrote Python scripts to retrieve and move user authentication files for integrating application into the Stellar Blockchain Platform
- Contributed to and proofread company's business plan

RESEARCH

MIT CSAIL Networks | Cambridge, MA | Spring 2019
Research Assistant, Systems for DNN Training– Python, Tensorflow, Horovod
- Worked on Ubuntu 16.04 Linux LTS Server
- Explored ResNet50 DNN training efficiency when parallelizing training over multiple GPUs

PROGRAMMING SKILLS

Web Development
React, Redux, JavaScript, Node, Flask, SQL, HTML, CSS

Big Data
Python, Pandas, NumPy, TensorFlow, Horovod

Other
C, C++, Java, Git, Bash, Confluence, Jira, Latex, PowerPoint, Excel

COURSEWORK

- Performance Engineering
- Design and Analysis of Algorithms
- Socio-Economic Networks
- Elements of Software Construction
- Machine Learning
- Artificial Intelligence
- Introduction to Algorithms
- Probability and Random Variables
- Mathematics for Computer Science
- Differential Equations
- Computation Structures
- Embedded Systems
- Oral Communication
- Fundamentals of Programming
- Principles of Finance

ACTIVITIES

Division III Varsity Men's Water Polo
2016 – Present | Captain
- 2016, 2018 D3 Eastern Water Polo Champions
- 2017, 2018 NCAA Academic All-American
- Reviewed resumes and cover letters, evaluated candidates, and lead technical interview as a 2019 Head Coach Search Committee member

MIT Theta Tau Technology Chapter
Fall 2017-Present | PD Chair, Tech Chair, Member
- Active member of Theta Tau Eta Chapter, MIT's only professional development fraternity

PERSONAL

Spoken Languages
English, Greek, French

Awards
Cum Laude, Three Hierarchs Achievement Award in Greek Language Studies

Interests
Water Polo, Caeleb Dressel, Kaatsu, *The Strokes*