

# PAT STEFANOU

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## EDUCATION

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**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

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**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
- 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
- Assembled full-stack Python web tool with React, Redux frontend and Python Flask backend
- Coded web crawler to scan web pages and web scrapers to collect training data

**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 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
- Set up landing page and company email system

## RESEARCH

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**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

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### Web Development

React, Redux, JavaScript, Node, Flask, SQL, HTML, CSS, Sass, Truffle

### Big Data

Python, Pandas, NumPy, TensorFlow, Horovod

### Other

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

## COURSEWORK

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- 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

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### 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

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### Languages

English, Greek, French, Latin, Ancient Greek

### Awards

Cum Laude, Three Hierarchs Achievement Award in Greek Language Studies

### Interests

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