MONICA SONG

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Education

HARVARD UNIVERSITY, A.B. in Computer Science, Secondary in Statistics

Exp. May 2019

Relevant Coursework: Data Science, Artificial Intelligence, Data Structures and Algorithms, Machine Learning, Functional Programming, Systems Programming, Probability, Stochastic Processes

Experience

CS182, Undergraduate Course in Artificial Intelligence

Fall 2018

Teaching Assistant

Hold office hours, grade problem sets and exams.

PERCEPTIVE AUTOMATA, Autonomous Driving Company

Summer 2018

Data Science and Computer Vision Intern

- Designed and deployed cognitive science experiment on Amazon Mturk.
- Researched neural style transfer techniques and tested them on dashcam video data.
- Implemented hidden markov model and compared predictions with recurrent neural network.

NATURED CO, Fresh Food Delivery Startup

Spring 2018

Backend Engineering Intern

Built feature to synchronize admin catalog with marketplace catalog using React, Express, and Javascript.

DESORA, Smart Home Appliance Company

Summer 2017

UI/UX and Product Design Intern

- Worked with engineering team to completely redesign existing smart home mobile app.
- Created 45-page white paper detailing the company's scientific and product design process.

CARAMAZZA LAB, Cognitive Neuropsychology Laboratory

Spring 2017

Research Assistant

• Implemented experiment to investigate age-related biases in the perception of body movement

Leadership and Activities

HCS DATAMATCH, Algorithm-based Matchmaking Service

September 2016 - February 2018

Website Programmer and Designer

- Fine-tune existing user experience of the sign-up, survey, and results processes.
- Created materials for publicity campaign, ultimately leading to a record high number of sign ups in 2017.

HARVARD BALLET COMPANY, Student Dance Group

September 2016 – December 2017

Producer, Light Designer, Treasurer, Dancer

- Collaborated with directors and dancers to plan production timeline. Created tech week schedule.
- Recruited and trained tech crew for stage managing, house managing, and sound operating roles.

Projects

AUTOMATIC TECH WEEK SCHEDULER, CS182 Final Project

December 2017

- Implemented algorithms to solve constraint satisfaction problem and built functional web application.
- Deployed web application on Amazon Elastic Compute Cloud Instance for use by 20+ dancers.

ROOTED, Vegan Algae Protein Bar Startup

Spring 2017

- Crafted brand identity. Designed marketing material. Developed business and marketing strategy.
- Incubated idea at Harvard Innovation Lab and pitched at I3 Challenge and other pitch competitions

Skills and Interests

Technical Skills: Python, OCaml, C, C++, PyTorch, Linux, Flask, OpenCV, Javascript, HTML, CSS, AWS, Mturk, SQL, Docker, Javascript, R, web scraping, data analysis

Misc. Skills: graphic design (Adobe Creative Suite), production design, marketing, branding

Interests: Entrepreneurship, self-driving technology, computer vision, cognitive science, design, food innovation