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, Linear Models

Experience

CS182, Undergraduate Course in Artificial Intelligence   Fall 2018
Teaching Assistant

PERCEPTIVE AUTOMATA   Summer 2018
Data Science and Computer Vision Intern
- 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   Spring 2018
Backend Engineering Intern
- Built feature to synchronize admin catalog with marketplace catalog using React, Express, and Javascript.

DESORA   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.

Research

MIT COMPUTATIONAL PERCEPTION & COGNITION GROUP   Sept. 2018 -
Undergraduate Researcher with Prof. Aude Oliva
- Conduct research in collaboration with MIT-IBM Watson AI Lab for undergraduate thesis.

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

HARVARD BALLET COMPANY, Student Dance Group   September 2016 –
Producer, Light Designer, Treasurer, Dancer
- Collaborated with directors and 30 dancers to plan production timeline. Created tech week schedule.
- Recruited and trained 5-person tech crew for stage managing, house managing, and sound operating roles.

HARVARD COMPUTER SOCIETY DATAMATCH   September 2016 – February 2018
Website Programmer and Lead Designer
- Fine-tuned UX. Created materials for publicity campaign, resulting in record-high number of signups.

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 EC2 for use by 30+ members of the Harvard Ballet Company.

ROOTED, Vegan Algae Protein Bar Startup   Spring 2017
- Co-founder. Crafted brand identity. Pitched at I3 Challenge and other competitions around the nation.

Skills and Interests

Technical Skills: Python, OCaml, C++, PyTorch, Linux, OpenCV, Javascript, SQL, Docker, R, HTML, CSS
Misc. Skills: graphic design (Adobe Creative Suite), production design, marketing, branding
Interests: Entrepreneurship, self-driving technology, computer vision, design, food innovation