Monica Song

Education

HARVARD UNIVERSITY

B.A. in Computer Science August 2015 - June 2019 Cambridge, MA

LA CAÑADA HIGH SCHOOL

September 2011 - June 2015 La Cañada Flintridge, CA GPA: 4.7 W, 4.0 UW

Skills

PROGRAMMING

Python (sklearn, pandas, numpy) • OCaml • C++/ C

Tools and Frameworks:

OpenCV • PyTorch • Linux • Flask • AWS • Mturk • SQL • Docker • ffmpeg Other

HTML • CSS • Javascript • R • Psychopy

DESIGN

Adobe Photoshop • Adobe InDesign • Adobe Illustrator

MISC. SKILLS

Production Design • Light Design • Marketing • Branding

Coursework

UNDERGRADUATE

Data Science
Systems Programming
Functional Programming
Probability
Stochastic Processes
Linear Models
Theory of Computation
Artificial Intelligence
Machine Learning
Data Structures and Algorithms

Interests

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

https://github.com/monicadsong https://kaledivergence.com

Experience

CS182, Undergraduate Artificial Intelligence Course

Teaching Assistant | September 2018 -

Hold office hours. Grade problem sets and exams.

PERCEPTIVE AUTOMATA, Autonomous Driving Company

Data Science and Computer Vision Intern | Summer 2018

Built and deployed cognitive science experiment on Amazon Mturk.

Researched style transfer techniques and tested them on dashcam data.

Implemented hidden markov model and compared predictions with RNN.

NATURED CO, Fresh Food Delivery Startup

Backend Engineering Intern | Spring 2018

Built feature to synchronize admin catalog with marketplace catalog

DESORA, Smart Home Cooking Appliance Startup

Product Design Intern | Summer 2017

Helped redesign existing smart home mobile app.

Pitched and created white paper detailing the company's scientific process.

Research

COMPUTATIONAL PERCEPTION AND COGNITION LAB

Undergraduate Researcher | September 2018 -

Work in collaboration with Prof. Aude Oliva and the MIT-IBM Watson AI Lab.

CARAMAZZA LAB, Cognitive Neuropsychology Laboratory

Research Assistant | Spring 2016

Implemented experiment to investigate age-related biases in the perception of body movement and limb momentum.

Activities

HARVARD BALLET COMPANY, Student Dance Group

Producer | September 2015 - December 2017

Planned production timeline and deadlines. Created tech week schedule. Recruited and trained tech crew for stage and house managing roles

HCS DATAMATCH, Algorithm-based Matchmaking Service

Website Programmer and Designer | September 2016 - February 2018 Fine-tuned existing UX for signup, survey, and result-viewing processes. Created promotional materials for cpublicity campaign.

Projects

TECH WEEK SCHEDULER, CS182 Final Project

December 2017

Implemented several algorithms to solve constraint satisfaction problem. Deployed web application on Amazon Elastic Compute Cloud Instance.

ROOTED, Vegan Algae Protein Bar Startup

Spring 2017

Crafted brand identity. Developed business and marketing strategy. Pitched idea at competitions across the nation.