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
Operating Systems
Functional Programming
Probability, Statistics
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

PERCEPTIVE AUTOMATA, Autonomous Driving Company

Data Science and Computer Vision Intern | May 2018 - August 2018

Gathered images from company database, built user interface and deployed cognitive science experiment on Amazon Mturk. Analyzed results.

Researched style transfer techniques and tested them on dashcam data.

Implemented hidden markov model and compared predictions with RNN.

Backend Engineering Intern | February 2018 - May 2018

Built feature to synchronize admin catalog with marketplace catalog

DESORA, Smart Home Cooking Appliance Startup

Product Design Intern | June 2017 - August 2017

NATURED CO, Fresh Food Delivery Startup

Worked with engineering team to completely redesign existing smart home mobile app. Wireframed the Register, Connect, and Cook user flows.

Pitched, storyboarded, wrote, and created 45-page white paper detailing the company's scientific and product design process.

CARAMAZZA LAB, Cognitive Neuropsychology Laboratory

Research Assistant | February 2016 - May 2016

Implemented experiment using Psychopy 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

Collaborated with directors and dancers to plan production timeline and deadlines. Created tech week schedule.

Recruited and train tech crew for stage managing, house managing, and sound operating 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. Communicated with bar and packaging manufacturers.

Pitched idea at competitions across the nation.