

MONICA SONG

monicasong@college.harvard.edu • 626-278-8212 • monicasong.com • [linkedin.com/in/monicadsong/](https://www.linkedin.com/in/monicadsong/)

Education

HARVARD UNIVERSITY, A.B. in Computer Science, Secondary in Statistics May 2019

Coursework: Data Science, Artificial Intelligence, Data Structures and Algorithms, Machine Learning, Functional Programming, Systems Programming, Probability, Stochastic Processes, Linear Models, Design Thinking

Skills: Python, OCaml, C/ C++, Linux, OpenCV, SQL, Docker, R, HTML, CSS, data analysis, machine learning, computer vision, graphic design (Adobe Creative Suite), production design, user research, marketing, branding

Experience

PERCEPTIVE AUTOMATA

June - August 2018

Data Science and Computer Vision Intern

- Gathered stimuli from database, built UI, and deployed cognitive science experiment on Amazon Mturk.
- Researched neural style transfer techniques and tested them on dashcam video data.
- Implemented statistical models on multiple datasets and compared predictions with deep learning models.

NATURED CO

February - May 2018

Backend Engineering Intern

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

DESORA

June - August 2017

UI/UX and Product Design Intern

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

Research

MIT CSAIL COMPUTATIONAL PERCEPTION & COGNITION GROUP

Sept. 2018 - Present

Undergraduate Researcher with Prof. Aude Oliva

- Conduct research on computer vision and train deep learning models for action prediction.

CARAMAZZA LAB, Cognitive Neuropsychology Laboratory

February - May 2017

Research Assistant

- Coded experiment to investigate age-related biases in the perception of body movement.

Technical 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

February - May 2017

- Product designer. Crafted brand identity. Pitched at I3 Challenge and other competitions around the nation.

Leadership and Activities

CS182, Undergraduate Course in Artificial Intelligence

Sept. 2018 - Present

Teaching Assistant

- Host weekly office hours. Answer questions on Piazza. Grade homework and exams.

HARVARD BALLET COMPANY

Sept. 2015 - May 2018

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

Sept. 2016 - February 2018

Website Programmer and Lead Designer

- Fine-tuned UX. Created materials for publicity campaign, resulting in record-high number of signups.

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