

## MONICA SONG

[monicasong@college.harvard.edu](mailto:monicasong@college.harvard.edu) • 626-278-8212 • [monicasong.com](http://monicasong.com) • [github.com/monicadsong](https://github.com/monicadsong)

### 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, Autonomous Driving Company** 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, 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.

### 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

**HCS DATAMATCH, Algorithm-based Matchmaking Service** September 2016 – February 2018  
*Website Programmer and Designer*

- Fine-tuned existing user experience. Created materials for publicity campaign.

**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. 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