Monica Song

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Education

HARVARD UNIVERSITY   Cambridge, MA
AB, Computer Science. GPA: 3.72   May 2019
Relevant Coursework: Functional Programming, Data Science, Artificial Intelligence,
Data Structures and Algorithms, Machine Learning

LA CANADA HIGH SCHOOL   La Canada, CA
GPA: 4.0 UW, 4.6 W   June 2015

Experience

NATURED CO, Fresh Food Delivery Startup   Cambridge, MA
Backend Engineering Intern   February 2018 -
- Work on front and back end stack of user recommendation service using React Native and Express
- Generate product suggestions for users using content-based and neighborhood-based algorithms
- Model current and predicted product inventory

DESORA, Smart Home Appliance Company   Cambridge, MA
UI/UX and Product Design Intern   Summer 2017
- Worked with engineering teams to completely redesign existing smart home mobile app. Wireframed the Register, Connect, and Cook user flows.
- Pitched, storyboarded, wrote, and created 45-page lab report detailing the company's scientific and product design process. Available for public distribution in 2018.

HCS DATAMATCH, **Algorithm-based Matchmaking Service**   Cambridge, MA
Website Programmer and Designer   2016 – Present
- Fine-tune existing CSS and Javascript code to improve user experience of the sign-up, survey, and results processes.
- Created promotional materials for publicity campaign, ultimately leading to a record high number of sign ups in 2017.

Leadership and Activities

HARVARD BALLET COMPANY
Producer, Light Designer, Treasurer, Dancer   2016- December 2017
- Collaborate with directors and dancers to plan production timeline and deadlines to ensure a successful show opening and run. Create tech week schedule.
- Recruit and train 5-member tech crew for stage managing, house managing, and sound operating roles.
- Designed lights and projections for the Spring 2017 and Fall 2016 shows.

Projects

AUTOMATIC TECH WEEK SCHEDULER   December 2017
- Implemented trio of algorithms (DFS, heuristic-search, and simulated annealing) to solve constraint satisfaction problem
- Built functional web application using Flask, SQL-ALchemy, and Bootstrap. Deployed web application on Amazon Elastic Compute Cloud Instance. Currently used by group of 30+ dancers for Spring 2018 performance

ROOTED, *Vegan Algae Protein Bar Startup*   Spring 2017
- Crafted brand identity. Designed marketing, promotional, social media, and packaging material
- Developed business and marketing strategy. Communicated with bar and packaging manufacturers
- Incubated idea at Harvard Innovation Lab and pitched at I3 Challenge and other pitch competitions

Skills and Interests

Technical: Python (pandas, scikit-learn, statsmodels, matplotlib), OCaml, C, R, Javascript, web scraping, machine learning
Interests: Ballet, data science, design, food innovation