# Matthew Dong

matthewydong.com

#### EDUCATION

University of California - Berkeley

Berkeley, CA

Expected Graduation: May 2020

Email: mdong@berkeley.edu

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Bachelor of Arts in Statistics; GPA: 3.89

## Programming Skills

• Languages (Proficient): Python, Java, R Languages (Familiar): Javascript, HTML/CSS

- Tools and Frameworks: Angular, Flask, Git, Bash, LATEX
- Python Data Science Stack: Pandas, NumPy/SciPy, SciKit-Learn, NLTK, Keras
- Relevant Subjects: Computer Programs, Data Structures, Statistics, Probability, Linear Algebra, Data Science, Machine Learning, Natural Language Processing, Web Development

## EXPERIENCE

• Computational Approaches to Human Learning (CAHL) Lab

May 2017 - Present

- Web Developer: Worked on AskOski (askoski.berkeley.edu), a UC Berkeley course recommender system serving the undergraduate student population of 30,000 students.

  Improved the content discovery process and browsing experience by designing and building an "intelligent course catalog" search feature into the user interface.
- Research Assistant: Studying the efficacy of lifting machine learning methodologies from other domains into educational contexts to help improve learning outcomes.
- Stat 89A: Linear Algebra for Data Science

Nov 2017 - Present

- Course Developer: Collaborated with staff members to scale existing infrastructure for the pilot full scale version of the course, as well as prototyped and refined new course materials.
- Teaching Assistant: Guided and mentored students during office hours and section, graded exams.

#### Projects

- SafeFront: A next generation 911 service for both first responders and relief agencies. Built backend service housing image classification and sentiment analysis models that processed incoming mobile data to rank severity of emergencies. Top 30 finish at PennApps XVIII out of 200 teams.

  Tools Used: Flask, Google Maps, Twilio APIs
- Spend Friend: Personal finance manager with Amazon Alexa skill. Developed RESTful API service communicating with database storing user information and spending data to display in front end templates. Won PayPal Sponsor Prize at Cal Hacks 5.0.

  Tools Used: Firebase, Flask, HTML & CSS
- Personal Productivity and Biometric Data Blog (2014 Present): Extensive and ongoing personal case study based on data collected on my life. Analyzed data for trends in sleep, efficiency, happiness, stress, and more. Wrote articles communicating results revealed by subsequent statistical analyses and published on personal website.
- Practical Applications Compilation (2015 Present): Collection of interesting real life problems encountered throughout my daily life and academic studies solved through leveraging my technical knowledge.

#### AWARDS

• Undergraduate Research Fellow - Summer 2018: Received a \$6,000 grant to conduct a self-directed research project under the guidance of a faculty mentor. Presented completed work on educational data mining applications at an undergraduate research conference.