Emily Le

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EDUCATION

University of California, Berkeley | Data Science & Economics — Expected Graduation: May 2022

- GPA: 3.8/4.0
- Relevant Coursework: Structure and Interpretation of Computer Programs; Data Structures; Principles and Techniques of Data Science; Data, Inference, and Decisions; Probability for Data Science; Econometrics

EXPERIENCE

Research Assistant — Aug 2021 - Present

Data Science Discovery Program, UC Berkeley | Berkeley, CA

- Collaborate with a project team and research fellow to analyze scraped data regarding police records
- Using Python in JupyterHub, cleaned data and extracted information based on project lead's specifications
- Create and maintain a Github to share analysis results with project lead and partners

Tutor for Data100 (Principles and Techniques of Data Science) — Aug 2021 - Present

UC Berkeley | Berkeley, CA

- Preside over weekly office hours to help students through homework problems and course concepts ranging from probability theory, data cleaning, and introductory machine learning algorithms
- Collaborate with other tutors to design grading rubrics for each homework assignment
- Hold weekly staff meetings to plan logistics for the following week

Computer Science Instructor — Sep 2019 - Sep 2021

Juni Learning | Remote

- Execute advanced computer science lesson plans ranging from basic data structures to applied programming over Zoom for students ages 8-18 while adapting to student needs and interests in Python and Java
- Communicate with parents on a regular basis, providing updates on student progress
- Facilitate lab sessions with up to 4 students at a time and guide them through their individual coursework

PROJECTS

Spam/Ham Classification

Cleaned and analyzed data to create a machine-learning algorithm to predict spam emails based on the subject and content of the email.

Code Breaking by Markov Chain Monte Carlo (MCMC)

Applied MCMC methods and the Metropolis algorithm to create a program that successfully decrypted a scrambled English message by picking a decoder with the highest likelihood

Scheme Interpreter

With a partner, developed a basic interpreter for the Scheme language in Python, allowing for functional programming

SKILLS

- Programming Languages: Python, Java, SQL, R (dplyr, ggplot)
- Well-versed Python Software/Libraries: Pandas, Seaborn, Matplotlib, Scikit-learn, Numpy, SciPy
- Familiar Python Libraries: Tensorflow, Keras, GeoPandas, folium, SymPy, Pymc3
- Proficient in: Excel, Powerpoint, Word, Microsoft Office, Tableau
- Bilingual in Mandarin