Austin Tsang

tsangaustin@berkeley.edu — austintsang.github.io

EDUCATION

University of California, Berkeley June 2015 - May 2019

B.A. Applied Mathematics and Computer Science Minor

Fiat Lux Scholarship Awardee

EXPERIENCE

Goodly Labs — Liberating Archives Researcher September 2018 - May 2019

- Created a web scraping algorithm (Python and Selenium) to extract over 2400 text files of a former California Governor's press releases and created algorithms using regular expressions to detect and revise reoccurring typos
- Categorized the press releases into bills and appointments to create a database for user queries
- Developed a web application (SQL and Flask) that provides database filtering for public research purposes
- Conducted analyses such as creating topic models and comparing gender ratios of appointees between parties

UC Berkeley Student Learning Center — Math Tutor June 2016 - August 2016

- Tutored over 50 incoming UC Berkeley students in introductory mathematics courses
- Helped students transition into the theoretical approach of mathematics by assisting in mathematical proofs
- Attended weekly training sessions to develop communication and professional skills

East Bay Municipal District — Data Analyst Intern June 2014 - August 2014

- Discovered statistical trends using computer software (Google Earth and Excel) to develop water saving strategies for local clients that reside in the East Bay Area
- Proposed water budget reports to minimize water usage rates of over 500 local residents
- Created a collage of water usage reports to present at a public exposition to encourage water preservation and to increase awareness of the California drought

PROJECTS

"EduCarbon" — A Carbon Footprint Tracker for Students (*Python, HTML, JavaScript, CSS*)

- Contributed to a classroom-based web application that focuses on crowdsourcing which allows target users (students between the ages of 8-10) to track and compare their carbon footprint status through visual representations by answering daily questionnaires concerning environmental habits
- Followed a strict project protocol that consists of ideation, observational studies, wireframes, and evaluations
- Presented at a project showcase and poster session to demonstrate the importance of developing environmentally friendly habits at a young age and encouraging early exposure to the issue of climate change

"BearMaps" — A Raster Program (*Java*)

- Created a program that emulates the rastering method of web-based map applications such as Google Maps
- Developed a method of rastering over 400,000 map images using the QuadTree data structure
- Integrated a procedure that computes the shared longitudes and latitudes of each image in order to display the correct adjacent images based on a user's desired display location

RELEVANT SKILLS

- Python, SQL, Excel