Seth Dumaguin

sethddumaguin@berkeley.edu | 310.433.0586 | sethdumaguin.github.io

EDUCATION

UC BERKELEY
B.A. in Data Science
Minor in Computer Science
Data Science GPA: 3.4
Expected Dec 2019

COURSEWORK

SOFTWARE
CS61A: Structure and Interpretation of Computer Programs
CS61B: Data Structures
CS188: Artificial Intelligence
CS61C: Great Ideas in Computer Architecture
CS170: Efficient Algorithms and Intractable Problems
CS186: Introduction to Database System
CS161: Computer Security*

DATA SCIENCE
DATA8: The Foundations of Data Science
DATA100: Principles and Techniques of Data Science
STAT140: Probability for Data Science
DATA102: Data, Inference, and Decisions*

MATHEMATICS
MATH54: Linear Algebra & Differential Equation
MATH53: Multivariable Calculus
MATH110: Linear Algebra

GIS
GEOG80: Geospatial Technologies
GEOG183: Cartographic Representation
GEOG186: Web Cartography

In Progress

SKILLS

PROGRAMMING
Proficient in: Python •Pandas •scikit-learn •numpy •matplotlib •seaborn •Java •SQL •HTML •CSS •JavaScript •jQuery
Familiar with: C •Scheme •React

TOOLS/APPLICATIONS
IntelliJ •WebStorm •Jupyter Notebook •ArcGIS •Pantheon •GitHub

OPERATING SYSTEMS
Windows •macOS

EXPERIENCE

T-MOBILE | Software Developer & Spatial Analyst Intern
May 2019 – Present | Bellevue, WA
- Implement Python scripts to automate spatial data processeing that were manually done by Spatial Analysts.
- Develop internal web applications with React and desktop toolkit with Python to be used by the Internet Service Provider Analyst Team.

UC BERKELEY PHYSICS DEPARTMENT | Webmaster
Dec. 2017 – Aug. 2019 | Berkeley, CA
- Create conference websites for the Chair of UC Berkeley's Physics Department, Wick Haxton, using Drupal8 and WordPress.
- Improve the website's aesthetics by editing the CSS and HTML, and use Git to edit and update files locally.

BERKELEY STUDENT TECH SERVICES | Student Tech Consultant
May 2018 – Aug 2019 | Berkeley, CA
- Educate students about Student Technology Services and University computing resources and policies.
- Assist users with basic hardware (networking peripherals) and software installations (antivirus, firewall, web browsers)

PROJECTS

ISSA MOOD | Python | Nov 2018
- Designed a mobile app integrating Spotify that generates music playlists based on user input mood using a linear regression model.
- Responsible for implementing a data scraping algorithm to retrieve lyrics from Genius's database of songs in the user library, and to use Google's NLP service to get sentiment analysis scores as a feature for the training data.

CAL-U-FIND-IT | JavaScript, CSS, HTML | Oct 2017
- Designed an interactive web application game for middle school students wanting to learn about landmarks in California.
- Implemented sampling algorithm with leafletjs mapping API to randomize a dataset of different questions about different locations.

PERCEPTRON CLASSIFIER | Python | Aug 2018
- Built and trained neural networks for digit classification, reinforcement learning, and language identification.

PACPACK | Python | July 2018
- Implemented A* search, minimax game trees, and reinforcement learning to create a cooperative PacMan bot to work with other student's bot.

MOVIE CLASSIFIER | Python, Numpy | April 2018
- K-nearest-neighbors classifier that guesses whether a movie is a romance or action film, based on the number of times certain words are in the screenplay.