ANTHONY LING

ant1ng@berkeley.edu ◇ https://ant1ng2.github.io

EDUCATION

University of California, Berkeley August 2016 - Present
Bachelor of Art, Computer Science GPA: 3.65
Master of Science, Computer Science

RELATED COURSEWORK

CS 70: Discrete Math and Probability Theory
CS 170: Eff. Alg. and Intractable Problems
CS 61B: Data Structures
CS 61C: Great Ideas in Computer Architecture
EECS 16A: Designing Info Devices and Systems
CS 188: Intro. to Artificial Intelligence
CS 169: Software Engineering
CS 186: Intro. to Databases
CS 189: Intro. to Machine Learning
EECS 127: Opt. Models and App.
INFO 159: Natural Language Processing
DATA 100: Principles and Tech. of Data Sci.

SKILLS

Programming Languages	Python, Java, HTML/CSS, Javascript, Markdown, SQL, C#
Python Packages	Numpy, Pandas, Matplotlib, PyTorch, Bokeh
Web App Frameworks	Django, Ruby on Rails, Jekyll, Flask
Software & Tools	MS Office, LaTeX, G Suite, Adobe Illustrator, Unity
Software Development	Test Automation, Docker, Bash Scripting, Git / SVN, Agile / Scrum

WORK EXPERIENCE

Freddie Mac, McLean May 2019-August 2019
Financial Engineering Intern

- On-site internship under this government-sponsored enterprise.
- Project 1: Developed data visualizations (Heatmaps, Bar charts, 3D) using Python libraries Bokeh and Pandas. The visualization system is used for housing loan risk analysis where feature recognition and correlation analysis are essential part of the algorithms and model development.
- Project 2: Developed a Django web application that hosts the visuals of the data models. The web application is designed for direct and interactive access to the data by the users. The visualization is configurable by customizing axises and Django caching is deployed for high performance.

Audience1st January 2019-May 2019
Software Developer

- Part of an academic project where groups of students are assigned to small businesses or startups to work on some of their features of their web application. Most of the projects were done in Rails. Involved in many Software Engineer practices, such as continuous integration and user stories.
- Worked on an application for Audience1st and implemented magic links and quality-of-life changes.

ACADEMIC PROJECTS

GamesCrafters 2018-2020
Research and Project Development

- Member of a group devoted to perfectly solving two-player games aka combinatorial and computational game theory.
- Developed the GamesmanPuzzles Project to solve puzzles using bottom-up BFS. Showcases the results using a Web API through Flask.
- Helped implement the Universal Web API to combine game solutions from the multiple GamesCrafters backends (ie GamesmanJava, GamesmanClassic). Specifically, worked on translating chess solutions from the Syzygy endgame tablebases from its public API.
- Researched using Decision Trees as a way of compressing key-value pairs into a series of feature decisions (i.e. number of pieces on the board, whether the second piece is an "X" or an "O").

ACADEMIC PROJECTS

DataBears, Berkeley 2019
Content Creator/TA

- Developed content for the SQLite lecture, which included a Jupyter Notebook lab, a Gradescope autograder environment, and a Introduction to Databases presentation.
- Content covered relational database, DMS, SQL queries and Pandas interactions.

TEACHING EXPERIENCE

Education Enrichment Center, Pleasanton June 2018-August 2018
Math Teacher/SAT Content Creator

- Responsible for teaching adolescents math in preparation for the school year as well as developed a curriculum for SAT practice.

Dept. of Computer Science, UC Berkeley 2017-2018
Tutor

- CS 61A: Structure and Interpretation of Computer Programs, CS 61B: Data Structures

EXTRA-CURRICUCULAR

President of the Amador Valley Game Design Club in 2016.
Publicity Chair of the Berkeley Unit 4 Hall Association in 2016-2017
Programmer/Artist in the Game Design Club in 2019.

REFERENCES

James Naslund: `https://www.linkedin.com/in/jim-naslund-4031093/`
Mason Chow: `https://www.linkedin.com/in/mason-chow-3502a89a/`
Dan Garcia: `https://people.eecs.berkeley.edu/~ddgarcia/`