Owen Halpert

310-913-7268 | ohalpert@berkeley.edu | linkedin.com/in/halpert | github.com/owenhalpert

EDUCATION

University of California, Berkeley · Berkeley, CA
Bachelor of Arts in Computer Science, Music Minor · *Aug. 2020 – May 2024*
- GPA: 3.9
- Relevant Coursework: Efficient Algorithms, Artificial Intelligence, Cybersecurity, Data Science, Data Structures and Algorithms, Structure and Interpretation of Computer Programs, Machine Structures, Discrete Math and Probability Theory, Linear Algebra, Introduction to Cloud Computing, Database Essentials in AWS
- Involvements: Computer Science Mentors, Berke1337 Cybersecurity, SUPERB Sneak Previews, Camp Kesem

PROJECTS

Coachella Over The Years | *Python, R* owenhalpert.com/compmusic · May 2023
- Led a comprehensive analysis of the evolution of genres, artists, and audio features at Coachella Music Festival
- Utilized musicological metrics from the Spotify API such as the changing danceability levels over several years
- Visualized metrics with chromagrams, dynamic time warping, cepstrograms, chordograms, and tempograms

Gitlet | *Java* · May 2022
- Developed a functioning version control system similar to Git with commit, reset, checkout, and merge commands
- Utilized File I/O libraries and SWE techniques to design and choose each data structure and algorithm effectively
- Implemented the "diffs" command which compares the contents of two commits through complex diff output

The Enigma Machine | *Java* · Feb. 2022
- Developed a working Enigma machine with full configuration, mirroring the device from World War II
- Utilized OOP, RegEx, Scanners, and JUnit testing to implement configuration parser and complex rotor system

EXPERIENCE

Software Developer Engineer Intern · Jun. 2023 – Aug. 2023
Amazon Web Services, OpenSearch · *East Palo Alto, CA*
- Improved average search query response time by up to 300x by implementing disk-based caching functionality
- Used third-party libraries such as Ehcache and Kryo Serializer to completely overhaul the existing cache system
- Automated testing workflows with data visualization and analysis using matplotlib, openpyxl, and Slackbots

CS61A Course Staff · Aug. 2022 – Jan. 2023
University of California, Berkeley · *Berkeley, CA*
- Official course staff position for Berkeley's introductory Computer Science class, CS61A, with over 1800 students
- Led a weekly section of beginner students through a mini-lecture and help them through a relevant worksheet
- Walked students through weekly lab assignments in Python, helping them with conceptual ideas in programming

Wealth Management Intern · May 2021 – May 2022
Trace Wealth Advisors · *Los Angeles, CA*
- Led monthly reporting in Excel for 22 individual investor accounts with assets totaling over $100 million
- Identified and optimized inefficiencies in reporting strategy using cloud storage systems and data scraping tools
- Redesigned new client approach strategy with overhaul of slide deck copy and visuals, advised website designing

Growth and Operations Intern · Sep. 2020 – June 2021
Florian · *Remote*
- Headed outreach strategy to reach over 1000 unique alumni, find new investors, and build a network of mentors
- Generated alumni leads by utilizing an email blast program to set up personal meetings with 100+ investors
- Led a redesign and multiple revisions of an Excel-based CRM system to maximize organization and efficiency
- Compiled over 1000 student emails to market Florian's ISA program to new students at Berkeley and UCLA

SKILLS, AWARDS AND INTERESTS

Skills: Python, Java, SQL, Scheme, Cloud Computing (AWS), Git, Excel, IntelliJ, VSCode, Jupyter, Numpy
Awards: Upsilon Pi Epsilon, Dean's List, Eilber Scholar, Harry J. Breithaupt, Jr. Scholarship, Renaissance Award
Interests: Puzzle hunts, escape rooms, improv, Tom Scott, cybersecurity, 99% Invisible, DJing, NYT Mini Crossword