PETER CHOI

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EDUCATION

University of California, Berkeley **Expected: May 2025**
Bachelor of Arts in Computer Science

Coursework: *Efficient Algorithms and Intractable Problems (CS 170), Machine Structures (CS 61C), Structure and Interpretation of Computer Programs (CS 61A), Data Structures (CS 61B), Discrete Mathematics and Probability Theory (CS 70), Designing Information Devices and Systems I (EECS 16A), Calculus (Math 1B)*

PROFESSIONAL EXPERIENCE

Fingenic, Inc. **Aug. 2022 – Feb. 2023**
Software Developer Intern San Francisco, CA

- Deployed microservices with an implementation of Clean Architecture to structure codebase and facilitate efficient reusability
- Collaborated with a partner to engineer and deploy a fully functional web framework utilizing Django and various APIs
- Constructed automated data ingestion from service utilizing Rest APIs to populate database every custom amount of time
- Developed a front-end software system in JavaScript that seamlessly integrated with backend APIs across the microservices

PERSONAL PROJECTS

Gitlet **Apr. 2022**
Java Berkeley, CA

- Built a version control system that saves, adds and commits changes in tracked file to the git repository similar to GitHub
- Employed SHA-1 encryption system to track files with identical file names but different file contents to insure safe commit
- Created a design of tree branches to enable the functions of reverting to user-picked files, and merging files in different branches
- Implemented Dijkstra's and Kruskal's Algorithm to successfully merge files within different branches of the git system

Money-ger **Nov. 2022**
JavaScript Berkeley, CA

- Developed a website that keeps track of everyday expenses suited for college students with clean User Interface and experience
- Integrated Reacts hooks and DOM to efficiently display old/new/deleted transaction items and show expense and income totals

Ataxx **Mar. 2022 – Apr. 2022**
Java Berkeley, CA

- Created a similar version of a strategy video game Ataxx where the goal is to have majority of the pieces on the board at the end
- Implemented an AI that utilizes Alpha-Beta pruning and Minimax algorithm to find the optimal move for both teams
- Built both the command line version and the GUI version of the game implementing both AI and manual players game play

Sorting Algorithm Visualizer **Aug. 2022 – Sep. 2022**
Python Berkeley, CA

- User-friendly program with an implementation of various sorting algorithms to demonstrate runtime and the process of sorting
- Integrated Pygame to visualize the sorting blocks and implemented buttons for users to adjust sorting time, algorithms, and size
- Demonstrated Bubble Sort, Insertion Sort, Selection Sort, Quick Sort, Merge Sort and Radix Sort through movement of blocks

Boat-UP **Feb. 2022 – Present**
Python Berkeley, CA

- Collaborated with a partner to analyzes a user's poker hand and provides the probability of winning the game or folding
- Utilized algorithms to calculate the probability of winning on factors such as number of players/community cards/hand strength
- Integrated bit-wise operations like binary arithmetic/logic gates/Boolean algebra to design an algorithm to evaluating poker hands

EXTRACURRICULAR ACTIVITIES

Sports Analytics at Berkeley **Feb. 2022 – Present**
Brooklyn Nets Project Berkeley, CA

- Analyzed factors that lead to optimal player development consistent with the Nets' roster using Data and Computer analytics
- Employed a computer vision model to analyze players using images of in-game player shooting form and movement on the court
- Presented areas of improvement, assess strengths and weaknesses of individual players to the recruiting of officer at the Nets

SKILLS & INTERESTS

- **Languages:** Fluent in English & Korean (800/800 on the Korean with listening SAT Subject Test)
- **Technical:** Python, Java, JavaScript, C, HTML, R, Tableau, GitHub, Azure, SQL, ADO
- Phi Kappa Tau – Nu Chapter
- **Hobbies**: *Soccer, Golf, Poker, Rock Climbing, Golden State Warriors, Live Music, Marvel Cinematic Universe, Snowboarding, Traveling*