BILLY CHOI

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EDUCATION

California Polytechnic State University - San Luis Obispo   September 2019 - June 2023
Bachelors of Science in Computer Science   GPA: 3.664
- **Notable Coursework:** Systems Programming, Programming Languages, Design and Analysis of Algorithms, Computer Architecture, Project-Based OOP, Software Engineering I-II, Discrete Structures, Linear Analysis, and Calculus I-IV

RELEVANT EXPERIENCE

Google | Mountain View, CA   June 2021 - Current
STEP Intern
- Designed and implemented infrastructure for policy migration launches, resulting in a sevenfold increase in iteration velocity.
- Created policy configuration to relax a certain auto-updating requirement for apps resulting in increase in freshness.
- Migrated an update notification instance from a deprecated system through utilizing protocol buffers and async methods.
- Analyzed constraint differences between client and server policies by drafting a SQL query and modifying some flags.
- Fixed multiple auto-update bugs such as a client foreground update issue and code smells in the codebase.

Pinterest | San Francisco, CA   June 2020 - July 2020
Engage Scholar
- Gained exposure to SWE topics through interacting with Pinterest staff in workshops as 1 of 41 selectedstudents.
- Completed industry-relevant coding challenges and reviewed them with my mentor, improving code comprehension.

College Track | SF Bay Area   May 2020 - July 2020
CA Residency Scholar
- Conducted research on Fortune 500 corporations such as Salesforce, Accel, JP Morgan, RingCentral, and Bloomberg.
- Spoke with over 30 professionals through hosting 1-on-1 meetings and attending tours of aforementioned corporations.

East Bay Municipal Utility District | Oakland, CA   June 2018 - July 2018
Pipeline Engineering Intern
- Produced entities such as trees and stop signs in Microstation and AutoCAD to be used in new pipeline maps.
- Updated the job metrics database through analyzing over 1,000 previous pipeline jobs and filling out an Excel spreadsheet.

PROGRAMMING PROJECTS

Get-Involved Forum: Python, JavaScript   December 2020 - April 2021
- Contributed to a forum project deployed through **Heroku** and tested with **Travis CI** and **Cypress** as 1 of 5 developers.
- Developed user login authentication through implementing a **Flask** server and interacting with a **MongoDB** collection.
- Paired authentication with **React** router switches enabled by tokens to require logging in and out of the forum.

Unix Shell: C   October 2020 - November 2020
- Built a unix shell with implementation of IPCs in order to simultaneously handle multiple processes for all unix commands.

Food Ordering and Rating API: JavaScript   June 2020 - July 2020
- Constructed a static live server and a dynamic **Express** server to collect and display real time orders on the client-side UI.
- Converted orders into **JSON** objects and stored them in a **MongoDB** collection.
- Developed routes in the dynamic server, enabling users to submit ratings that are then stored in a **JSON** file through **fs**.

Virtual World: Java   April 2020 - June 2020
- Contributed to a **Processing** environment by creating entities and implementing a volcanic effect activated by a click.
- Designed a **UML** diagram to track the scope of each class and interface as well as their interactions.

Solar-Powered Temperature and Humidity Monitor: Arduino   June 2018 - July 2018
- Programmed an **Arduino** Uno R3 and assembled electrical parts to display weather measurements on a LCD monitor.

DISTINCTIONS

Insight Series Participant @ Goldman Sachs: Attended development and exploratory workshops.   June 2020 - August 2020
SWE Experience Certificate @ JP Morgan: Set up a dynamic dashboard for analysis of stock price.   June 2020
Best Beginner's Hack @ SLO Hacks: Developed a laughter-detection game in a four person team.   March 2020

PROGRAMMING SKILLS

Python | Java | C | JavaScript | HTML | CSS |Assembly | MongoDB| Express | React | Guice | SQL