

# BILLY CHOI

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## EDUCATION

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### 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

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### 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 25% 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 bugs such as a client foreground update issue and code smells in the auto-update 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 selected students.
- 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

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### 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

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**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

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