# YIFENG (ETHAN) HE

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## **EDUCATION**

#### University of California, Davis, Davis, CA

2019 - Present

B.S. in Applied Mathematics, B.S. in Computer Science, GPA: 3.912/4.000

Anticipated Graduation Date: 06/2023

Relevant Coursework: Artificial Intelligence, Computer Graphics, OS, Programming Languages

**Honors**:

Dean's Honor List Fall 2019, Spring 2020, Spring 2021

## SKILLS

• Programming Languages:  $C \approx C++ \approx Python > Haskell \approx js > Java \approx SQL$ 

## **EXPERIENCE**

**ByteDance** Apr. 2021 – Aug. 2021

Software Engineering Intern Income Platform Team

- Use microservice technic to connect all parts of the author income settlement bushiness.
- Transform author-relation data architecture design from relational database (SQL) to graph database (Gremlin) to allow better efficiency in the business model.
- Refactor the income calculation control process with visitor design pattern in Python 3 to allow better extendability and maintainability.
- Use better modular design to allow easier change of calculation strategy from PM.

Xigua Video May. 2021 – June. 2021

Software Engineering Intern Author Experience Team

- Create a data cleaner script with ORM to maintain the size and readability of online data settlement table (about 5 billion rows) so that all interface built on top of that chart have reasonable performance.
- Create the offline flow of Medium Video Encouragement Project for weekly data calculation, and build the interface for front-end (web and mobile app) to display the data visualization.

#### HackerHub UC Davis Club

Jul. 2020 - Present

Technical Officer

- Organizes and leads the Code Jam Competition on various topics.
- Teach in introductory programming workshops in tops: Assembly, Functional Programming.

## PROJECT

#### **Genshine Impact Wishes Analyzer**

Aug. 2021 - Sep. 2021

- Fetch wished data from MiHoYo and process into different categories.
- Store data into local database automatically, write into excel for data analysis by option.
- Generate text or graph visualization report from data analyze result

dcash-server May. 2021 – July. 2021

- Create a multi-threaded API server using C++, allowing user to create account, deposit, and transfer,
- Use MySQL to store and maintain user data.
- Make API calls to the Stripe API server to handle credit card information.

permualgebra Dec. 2020 – Jan. 2021

Personal Project

Python package that allows calculation of algebraic permutations.