

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: 3.875/4.000

Anticipated Graduation Date: 06/2023

Relevant Coursework: AI, Deep Learning, Recommender Systems, Graphics, OS, Real Analysis, Complex Variables, Modern Algebra, ODE

Honors:

Dean's Honor List

Fall 2019, Spring 2020, Spring 2021

⚙️ SKILLS

- Programming Languages: Python \geq C \approx C++ \geq R \approx Haskell \geq js \approx Rust $>$ 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 business.
- Transform author-relation data architecture design from relational database (SQL) to graph database (Grem-lin) to allow better efficiency for 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 by product manager.

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 services built on top of that table 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 topics: Assembly, Functional Programming.

👥 SELECTED PROJECT

ImageOrientation

Mar. 2022 – Apr. 2022

- Pre-process image data by rotating them with random generated angles, and assign these angles as label
- Design the appropriate CNN for this regression task, test and improve the model
- Hyper-parameter tuning based on train, validation, and test results to achieve better performance

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

Python package that allows calculation of algebraic permutations.