# 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

Anticipated Graduation Date: 06/2023

GPA: 3.912/4.000

### **EXPERIENCE**

#### ByteDance, Toutiao

April. 2021 - Present

Server-end Developer Intern

Brief introduction: I am a member of the TIP (Toutiao Income Platform) group. The main job of our group is to allocate income, subsidy, and bonus for content creators depends on data. My major jobs are:

- Data management.
  - Clean data in tables stored in MySQL database.
  - Interact with big data (HIVE table) and Graph DB with Apache Gremlin.
  - Most of the tables have about 4 billion rows, and getting millions of new data on a daily bases.
- State control.
  - Use scripts to do RPC calls to control the state of our service module and calculation engine.
  - Use scripts to do the control flow that ensure the communication of all components of the large platform.

permualgebra Dec. 2020 – Jan. 2021

Author, Maintainer Individual Project

Brief introduction: Python package that allows calculation of algebraic permutations.

Load On Dice Game Nov. 2020 – Dec. 2020

Main Contributor Group Project

Brief introduction: MATLAB game project with MATLAB appdesigner.

#### HackerHub UC Davis Club

Jul. 2020 - Present

Technical Officer

Brief introduction: Technical officer at HackerHub organizes and leads the bi-weekly Code Jam. The bi-weekly Code Jam is based on any interesting CS topic (Machine Learning, Assembly, APIs, . . .).

#### Fishbone++

Author Individual Project

Brief introduction: a delightful oh-my-zsh theme, written in shell script.

#### **Python Programming for Children**

May. 2019 – Jul. 2020

Second Author Collaborated with friends in other colleges

Brief introduction: a book (in Chinese) teach basic Python scripts to K-8 and middle school level students. (In printing/publishing progress).

#### SKILLS

- Programming Languages:  $C \approx C++ \approx Python \ge Haskell \approx EMFX > Java \approx SQL$
- Platform: GNU/Linux (Fedora), Mac OS
- Cron job: time based job scheduler in unix/linux environment.

Dean's Honor List

Fall 2019, Spring 2020, Spring 2021

## ■ Course Taken (Taking)

- Math: MAT 108 (Intro to Abstract Math), MAT 119A (ODE), MAT 127A,B (Real Analysis), MAT 135A (Probability Theory), MAT 150A (Modern Algebra)
- Computer Science: ECS 120 (Theory Computation), ECS 122A,B (Algorithm), ECS 150 (OS), ECS 154A (Computer Architecture), ECS 170 (AI)
- Statistics: STA 103 (Applied Statistics)
- Music: MUS 117 (Broadway Musical)