

Yifeng He

CONTACT INFORMATION	Voice: (561) 990-6808 E-mail: yfhe@ucdavis.edu WWW: https://eyh0602.github.io/	
RESEARCH INTERESTS	Content based recommender systems, image classification, object detection, collaborative filtering, programming languages for AI, music-related machine learning	
EDUCATION	University of California, Davis , Davis, California, USA. GPA: 3.887 B.S., Computer Science, 2019 – Present (Anticipated Graduation date: 06/2023) B.S., Applied Mathematics, 2019 – Present (Anticipated Graduation date: 06/2023)	
HONORS AND AWARDS	Dean's Honor List, 2019, 2020, 2021, 2022	
PUBLICATIONS	He, Y , (in press), <i>Big Data and Deep Learning Techniques Applied in Intelligent Recommender Systems</i> , PPRAI 2022.	
PROFESSIONAL EXPERIENCE	ByteDance	04/2021 – 08/2021
	<i>Software Engineering Intern</i> , Income Platform Team	
	<ul style="list-style-type: none">Used microservice technic to connect all parts of the author income settlement bushiness.Transformed author-relation data architecture design from relational database (SQL) to graph database (Gremlin) to allow better efficiency for the business model.Refactored the income calculation control process with visitor design pattern in Python 3 to allow better extendability and maintainability.Used better modular design to allow easier change of calculation strategy by product manager.	
	Xigua Video	05/2021 – 06/2021
	<i>Software Engineering Intern</i> , Author Experience Team	
	<ul style="list-style-type: none">Created 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.Created 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	07/2020 – Present
	<i>Technical Officer - Co-President - President</i> <ul style="list-style-type: none">Organized and leads the Code Jam Competition on various topics.Taught in introductory programming workshops in tops: Assembly, Functional Programming.	
PROJECTS	Music Genre Classifier	05/2022 – 06/2022
	<ul style="list-style-type: none">Processed music samples into spectrogram by Short-time Fourier transformDesigned the appropriate model (CNN) to classify spectrograms into categoryAnalyzed the resulting model and test outputs with saliency maps	
	ImageOrientation	03/2022 – 04/2022
	<ul style="list-style-type: none">Pre-processed image data by rotating them with random generated angles, and assign these angles as labelDesigned the appropriate CNN for this regression task, test and improve the modelApplied Hyper-parameter tuning based on train, validation, and test results to achieve better performance	

Genshine Impact Wishes Analyzer

08/2021 – 09/2021

- Designed fetching process of gacha data from MiHoYo and process into different categories.
- Stored data into local database automatically, write into excel for data analysis by option.
- Generated text or graph visualization report from data analyze result

dcash-server

05/2021 – 07/2021

- Created a multi-threaded API server using C++, allowing user to create account, deposit, and transfer,
- Used MySQL to store and maintain user data.
- Made 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.

Fishbone++

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

COMPUTER SKILLS • Languages: Python \geq C \approx C++ \geq R \geq Haskell \geq js \approx Rust $>$ Java \approx SQL