Jian-Cheng Huang

(949) 508-8794 | erichuang4312@gmail.com | https://github.com/HE-1234 | https://www.linkedin.com/in/eric--huang/

EDUCATION

University of California, Irvine Expected: June 2024
B.S, Major in Computer Science, Minor in Statistics GPA: 3.94 / 4.00

- Awards: Dean's Honor List (2020 - Present), ICS Honors, Hack@UCI 2022(1st place Most Polished Game | 2nd place Best Use of Google Cloud API), Hack@UCI 2023(Best use of CockroachDB)
- Relevant Coursework: Design and Analysis of Algorithms, Data Structures, Machine Learning and Data-Mining, Data Management, Graph Algorithms, Information Retrieval, Operating Systems, System Design

EXPERIENCE

Sealand Securities Co, Shanghai China June 2023 - September 2023
Quantitative Finance Researcher Intern

- Leveraged LSTM and XGBoost models via **TensorFlow** and **Scikit-Learn** to enhance the original algorithm-based forecasts for key revenue determinants, resulting in a 30% boost in prediction accuracy
- Employed **Numpy** and **Pandas** to implement investment strategies for stock trading, and visualized returns of varying strategies with **Matplotlib**, creating graphs integral to reports and strategy analysis
- Used **Selenium** to scrape engagement metrics, such as views, likes, saves, from diverse media websites, then applied LSTM to analyze derived ratios (like-to-view, save-to-view) to assess shifting investor interest across industries

CommerzBank AG, Shanghai China June 2023 - September 2023
Corporate Credit Risk Intern

- Developed an automated financial reporting tool using **Python** and **Pandas**, increasing report generation speed by 90%
- Introduced a user interface for data uploads, facilitating seamless data transfer and visualization from Excel to PowerPoint
- Conducted in-depth financial research on 50+ companies across banking, manufacturing, and tech sectors, analyzing income statements, balance sheets, and cash flows to derive lending insights

Academia Sinica, Taipei Taiwan June 2022 - May 2023
Research Intern

- Remodeled, adapted and tested various NLP models in **PyTorch** to build a text classification application to help historians recognize and classify economic-event-related texts on 207k Chinese ancient documents
- Created over 40 datasets by extracting and processing data from Ming Shilu, an event log for the Ming dynasty
- Leveraged OpenAI's API to perform weakly supervised classification with **GPT-3** on extracted texts, achieving a 35% accuracy improvement over the baseline model

PROJECTS

EduSeeker - UCI's Educational Search Engine December 2022 - March 2023

- Led a team of 4 to develop a specialized search engine for UCI's academic resources, indexing over 50,000 school URLs
- Engineered a web crawler for data acquisition, and constructed the inverted indexer with advanced text processing techniques like tokenization, stemming, and stop words removal
- Achieved a 50% improvement in search accuracy and a 40% reduction in query processing time by optimizing search algorithms, incorporating TF-IDF, HITS, cosine similarity, and PageRank
- Employed **Flask** for backend and **React** for the frontend, enhancing user interactivity and accessibility
- Enabled voice search function through **speech recognition** integration, offering a multifaceted search approach

Zot Hub | Hack at UCI 2023 February 2023

- Collaborated with a team of 4 to design, build and launch a social media platform that streamlined all school club-related information for UCI students and club officers
- Developed a frontend interface using React, Bootstrap, CSS, HTML, and Javascript, and created a **RESTful API** with a **SQL** backend using **Django** and **CockroachDB**
- Implemented an AI recommendation engine that provides personalized suggestions for discovering new clubs and events based on users' interests

Youtube Fast-Forward February 2022 - March 2022

- Developed an **Android** application using **Kotlin** that simplifies the management of Youtube playlists for users
- Integrated **Youtube Data API V3** for efficient playlist information gathering and seamless user modifications
- Improved the app's performance by implementing asynchronous network calls, leading to a 40% increase in speed
- Utilized Android Studio to build, test, and debug the application, ensuring compatibility with a range of devices

SKILLS

Programming languages: Python, C++, C, Java, HTML/CSS, JavaScript, R, Kotlin, SQL, Shell/Bash

Tools and Framework: Git, Node.js, React, Flask, Bootstrap, MySQL, Numpy, Pandas, Pytorch/ Pyro, TensorFlow, MongoDB