

Eric Chou

eschou1@uci.edu | (510)-366-6095 | www.github.com/babychoujr

EXPERIENCE

STATE FARM

Software Engineer

JUNE 2021 - PRESENT
Remote (Bloomington, IL)

- Deploying production-ready ETL pipelines to automate high-volume and near real-time data delivery from Kinesis Firehose and SMTP connections using AWS serverless microservices with Python and Pyspark.
- Designed and maintained a AWS Quicksight embedded dashboard online user interface for our internal management customers, business analysts and partners.
- Collaborated with product owners, business customers, and data scientists in an agile environment.

U.S. DEPARTMENT OF STATE

Research Lead

DEC 2020 - JUNE 2021
Remote

- Deploy a realistic key phrase identification model used to predict classification of large sets of texts and classifying them into subjects with the ability to take into account specific words and phrases of interest that needs to be flagged
- Researched and processed data used to train the classification model following a specific criteria related to national interests
- Designed a POC website hosted on AppEngine in Google Cloud used as a interface to allow users to analyze research documents used for future machine learning models.

UNIVERSITY OF CALIFORNIA, IRVINE

Undergraduate Learning Assistant

SEP 2020 - DEC 2020
Irvine, CA

- Enhancing active learning through collaborative and interactive small group instruction with students
- Mentoring students in office hours and in lecture utilizing meta-cognition and question redirecting techniques

PROGRESSIVE KIDS

Programming Instructor

JUN 2019 - AUG 2019
Newark, CA

- Organized and guided the instruction of programming fundamentals in Python, Java, C++ for over 120 students.
- Collaborated with other instructors to improve instructional material to provide a better learning experience.
- Guided students to design a Tic-Tac-Toe game with graphical user interface in Python

EDUCATION

UNIVERSITY OF CALIFORNIA IRVINE

Bachelor of Science in Computer Science, Minor in Statistics

Relevant Coursework: Computer System Architecture, Computer Networks, Machine Learning, Artificial Intelligence

SEP 2017 - JUNE 2021

PROJECTS

CHECKERS ARTIFICIAL INTELLIGENCE BOT

NOV 2020 - DEC 2020

- Python-based bot utilizing a simple Monte Carlo Tree Search with a selection stage adopting a UCB formula
- Optimized to simulate 400 iterations in less than 10 seconds before predicting the best possible move

SENTIMENT ANALYSIS STOCK TREND PREDICTION MODEL

SEP 2020 - DEC 2020

- Scraped tweets from Stocktwits and classified bullish/bearish labels using a Glove embedding model.
- Deployed a LSTM based model to use the positive/negative tweets to forecast seasonlity and trends in future stock prices
- Increased R-squared by over 10% when compared with the baseline LSTM model.

SEARCH ENGINE PAGE RANKER

MAY 2019 - JUN 2019

- Implemented a Python-based search engine that retrieves according to user query and outputs highest ranking UCI ICS web pages

- Created a inverted index storing web pages in the UCI ICS corpus based on tf-idf score, word frequency, and other heuristics in a SQL database to increase searching efficiency

HACKUCI 2021

MARCH 2021

Pomodoro Timer - GoodFocus

- Implemented the front-end of the application utilizing pure HTML/Javascript/CSS, along with the chrome extension API (specifically the identity and storage features).
- Though the user data associated with one's account is retrieved from Google, we keep the Pomodoro session-related information associated with these users in the database behind our back-end API.
- We implemented a RESTful API utilizing Django Rest Framework, hooking into a SQLite database. Upon successful completion of a focus session, session details are sent to the API for associating with the user and storing the data.
- Winner of the Entrepreneurial Hack at HACKUCI 2021

TAKE-A-WALK

JUNE 2021

Wellness Trail Recommendation App

- Implemented in React Native providing users with recommendations on nearby hiking/trail spots to promote users to go out and explore the world during the COVID pandemic
- Connected to a Google Firebase Database storing and tracking user information used to provide personal preferences for outdoor spots.
- Utilized the GoogleMaps API to provide users with a GPS routing system to allow users to make nearby hiking/trail spots more accessible for the user.

SKILLS

Languages	Python, Java, SQL, R, Javascript, C/C++, Terraform
Technologies	React Native, AWS, Apache Spark, pandas, numpy, dask, pyarrow
Interests	MMA, Taekwondo, Baseball, Traveling
Certifications	AWS Certified Cloud Practitioner, AWS Certified Machine Learning – Specialty