Chaoran Huang

Providence, RI | 949-522-1904 | @mail | @linkedin | @github

PROFESSIONAL SUMMARY

Experienced Full Stack Developer who successfully advanced entrepreneurial venture. Skilled in multiple programming languages and frameworks. Obtained a rich research experience in Deep Learning, Cryptography, Auction Theory, Game Theory and System Design.

TECHNICAL SKILLS

Languages: JAVA, Python, C/C++, SQL (MySQL), JavaScript, TypeScript, Assembly

Frameworks: Spring Boot, Flask, Django, Crypto++, jQuery, React, Angular, Node.js, ExpressJS, Bootstrap

DevOps and API Tools: Git, Docker, Kubernetes, Jekins, Postman

Cloud and Security Tools: Amazon Web Services (AWS), Google Cloud Platform (GCP), SQL Server, Linux (Configuring and Managing)

EDUCATION

Brown University University of California, Irvine MS, Computer Science | GPA: 3.8 BS, Computer Science | Major GPA: 3.9 Sept 2022 - May 2024 Sept 2017 - June 2021

EXPERIENCE

Full-Stack Developer, Co-founder | Shuxiang Fayun Technology Co., Ltd., Shanghai, China

August 2023 -Present

- Spearheading the development and integration of an all-in-one business management webapp and a QA-focused large language model (LLM) for legal professionals. Played a pivotal role in designing the system architecture and workflow, ensuring efficient and seamless operation.
- Project: Integrated Issue Management Webapp and Language Model for Legal Practice
- Orchestrated the system design, defining the architecture and workflow logic to optimize communication and case management in legal practices.
- Built the webapp using full-stack technologies, focusing on **React, Next.js, and Tailwind** for the frontend, and **Spring Boot with AWS DynamoDB, ElasticBeanstalk, EC2** for the backend.
- Developed the LLM with PyTorch and Transformers to aid lawyers in legal case understanding and document preparation.
- Integrated advanced third-party components like Tiptap for rich text editing and Spring Boot Retrofit2, Spring Security for enhanced functionality.

- Achievements:

- The bespoke system design significantly streamlined communication and workflow within law firms.
- The project was widely adopted by multiple law agencies and solo practitioners, generating considerable revenue. (> 1 million)

Software Developer | My Car Auction, Inc, Irvine, CA

March 2021 - July 2022

- Contributed to the development of an automated car inspection application and management system, including web app and software development and micro-service integration to enhance business operations.
- Project 1: Competitor Price Scraping System
 - Designed and developed a web scraping system using Selenium and Puppeteer/Pyppeteer to fetch competitor pricing data
 - Leveraged Axios/Express, AWS DynamoDB, and Vaadin framework for data processing and presentation
 - Automated the system with ngrok and researched anti-scraping techniques for efficiency
 - Successfully scaled the system to scrape over **3000** competitors' auction vehicle prices daily across the entire U.S., providing comprehensive market insights.
- Project 2: Oracle NetSuite Enterprise Resource Planning (ERP) and Customer Relationship Management (CRM) System
 - Developed and integrated NetSuite CRM and ERP system software with iTextPDF, DocuSign, PandaDoc, and Auto-lead Data Format (ADF) using *Java Spring Boot, OAuth2.0, and Retrofit2*
 - -Coordinated and customized company's Financial & Accounting team's requirements in collaboration with Oracle NetSuite consultants, greatly boosted working efficiency
- Project 3: Named Entity Recognizer for Used Vehicles (NLP)
- Designed *Natural Language Processing model* with *SpaCy* to recognize important attributes from customers' descriptions and facilitate search engine algorithm to retrieve regulated vehicle information
- Completed a workflow from inital data collection & cleaning, model training & deployment and software integration.
- Dived into different models: **CNN, LSTM and transformers: BERT**, analyzed their performance based on their strength and weakness.
- Enabled offshore team to rapidly receive valuable and pertinent information, greatly improved the auto-lead number by **70%** per day.
- Project 4: Sales Dashboard Web App
- Developed an interactive dashboard using *Flask*, *Angular*, *and ECharts* for visualizing sales data, enabling better marketing decisions and automating commission calculations for employee payroll
- Integrated micro-services for offshore teams and the Finance Department to track sales processes and vehicle auction stages

ACADEMIC PROJECTS

Ads Exchange Simulation Analyst | *Brown University*

Jan 2023 - May 2023

- Excelled in a rigorous Ads Exchange Game project, securing a top-3 finish among competitors through auction strategy and advanced predictive analytics.
- Conducted an in-depth analysis of diverse auction models including First/Second Price Auction and the VCG Mechanism, applying these insights to significantly enhance bidding strategies for increased profitability.
- Implemented cutting-edge machine learning techniques by developing a **Boltzmann Machine** combined with **Q-learning**. Integrated these with a **Viterbi algorithm-powered Hidden Markov Model** to refine prediction accuracy and system efficiency in real-time bidding environments.

Data & Web App Development | *University of California, Irvine*

March 2020 - June 2020

- Developed a movie search website using Java and JavaScript, managing the backend database with MySQL, and deploying the project via Amazon AWS for an average load time under 300ms in pressure text.
- Enhanced website functionality by implementing full-text search, auto-complete, stored procedures, and various performance-tuning techniques.
- Strengthened website security with ReCAPTCHA and encrypted passwords, while expanding versatility by creating an accompanying **Android** mobile app with **Google firebase**.

Web Crawler & Search Engine | *University of California, Irvine*

March 2020 - June 2020

- Developed a *Python-based* web crawler to navigate all web pages under ics.uci.edu, utilizing packages such as *Requests, Re, and BeautifulSoup*.
- Created a web-based UI search engine via techniques: like TF-IDF, for querying user-entered text in local databases, leveraging cosine similarity to measure the relationship between input text and crawled web pages.
- Achieved a response time of **100ms** for search queries, enabling fast and efficient user interactions.
- Presented a comprehensive report detailing the accurate number of pages within the specified domain and successfully avoiding crawler traps.