Yuxuan Xiong

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TECHNICAL SKILLS

Programming Java, Python, JavaScript, Dart, HTML/CSS, Node.js, C/C++

Frameworks / Libraries Django, , Spring, Vue.js, React.js, Express.js, Flutter

DatabasesMySQL, MongoDB, Neo4j, RedisCloud / Big DataAWS, Netlify, Heroku, Spark

WORK EXPERIENCE

Geward, Software Engineering Intern | Philadelphia

Jun 2023 - Oct 2023

- Spearheaded the frontend development of the B2C food ordering platform using Flutter and Material UI, resulting in a 20% uptick in restaurant partnerships within 3 months.
- Designed the business-side restaurant dashboard <u>mobile app</u> that allows restaurant owners to modify their menu, handle dine-in/pick-up orders and organize their open hours.
- Added dynamic pricing, letting clients to identify and update prices based on the most popular items, driving revenue.
- Expanded APIs to support new functionality including pricing discounts and user comments.
- Partnered with Product team members to conduct usability testing, based on customer feedback made design improvements resulting in a 40% increase in user engagement and a 15% boost in overall satisfaction rates.

HDR, Computational Design Consultant | Berkeley

Jun 2021 - Aug 2021

- Developed a Python generative design tool, automating urban massing optimization with urban network and FAR data.
- Restructured urban design workflow and designed the initial internal CAD software manual for urban planners.

EDUCATION

University of Pennsylvania, Philadelphia

Sep 2022 - May 2024

Master of Computer and Information Technology, GPA: 4.00/4.00

University of Pennsylvania, *Philadelphia* Master of Architecture, GPA: 3.95/4.00

Sep 2019 - May 2022

PROGRAMMING PROJECTS

Regeggs Search Engine – Find the most relevant and diverse websites for your search terms

Apr - May 2024

- Developed a distributed computing system in Java to crawl, index, and rank over 1 million pages from a comprehensive seed list, using TF-IDF, PageRank and n-gram algorithms to boost relevancy and diversity of search results.
- Built a robust webserver with RESTful APIs for autocomplete, result fetching and preview, based on an open-source English corpus and cached content from 1 million pages, improving user experience when navigating through results.
- Deployed key-value store on twelve AWS EC2 nodes for distributed computing, reducing result fetching time by 80% for multi-term search queries.
- Articulated snippet generation using OpenNLP by extracting the most relevant sentences that contain the search terms, enhancing user's understanding of the page content.

Disney World Planner - Optimize your trip for preferred climate, favorite ride availability, and flights

Oct - Dec 2023

- Developed an interactive itinerary recommendation system using React and Material UI.
- Engineered an Express backend with RESTful APIs, tailored user experience by dynamically querying based on preferences.
- Deployed a MySQL database on AWS EC2, enhanced with NumPy and Pandas for data analysis of over 6 million data points, organizing ride and climate data to support itinerary planning.
- Reduced processing time by 90% through SQL index and query optimization.

Tennis Reservation System - A web application allowing students and staff to book tennis courts

May - Aug 2023

- Developed a Spring Boot backend with RESTful API endpoints for user and court management.
- Established robust authentication and authorization by leveraging Spring Security.
- Crafted an intuitive frontend with React and Material UI, featuring a DevExpress scheduler for court reservations.
- Optimized the reservation system with real-time court availability updates and automated confirmation emails.