JUNHONG (JUHO) YE

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EDUCATION

University of Illinois Urbana-Champaign, Grainger College of Engineering   August 2022-May 2024
Master of Engineering in Materials Science and Engineering
- Core Courses: Database System, Data Visualization, Applied Parallel Programming, System Programming, Computer Architecture, Aritficial Intelligence, Materials Informatics, Digital Materials Introduction

Sun Yat-sen University, School of Materials Science and Engineering   September 2016-June 2020
Bachelor of Engineering in Macromolecular Materials and Engineering
- Core Courses: Linear Algebra, Data Structures and Algorithms, Computational Materials Science

SKILLS

- C++ (Online dataset analysis, CUDA, advanced)
- Python (Jupyter Notebook, numpy, PyElastica, pandas, advanced)
- JavaScript & TypeScript (React.js, Frontend and backend implementataion, advanced)
- CSS & Html (Building frontend and modifying the visualization on webpage, advanced)
- SQL & MongoDB (Data analysis and filtering, advanced)
- GCP & AWS (Website deployment, advanced)

PROJECTS

Personal Portfolio Website   Champaign, U. S.
Personal Project   Jun 2024-Jul 2024
- Designed and deployed a personal portfolio website on netlify to showcase my skills and experience.
- Implemented a responsive React.js frontend using JavaScript, HTML and CSS; key features include a navigational menu, interactive tooltips, dynamic images, redirecting icon buttons, and file download.

SAVELIVE-Affordable & Save Rent in Los Angeles   Champaign, U. S.
Course Project of CS 411 Database Systems   June 2023-August 2023
- Developed an SQL database for efficient query operations, facilitating users to efficiently search the appropriate housing based on price and local crime rates in LA
- Implemented React.js frontend using JavaScript and HTML; features include account login, menu, map, keyword search, rent & crime details, and favorite listings
- Designed backend operations such as crime rate retrieval, rent information fetch, and geospatial filters to prevent close-proximity housing duplication
- Integrated LA's rent database (16.4k rows, 12 columns) with its crime database (318k rows, 28 columns)

Narrative Visualization of Chinese Economic History   Champaign, U. S.
Course Project of CS 416 Data Visualization   June 2023-August 2023
- Developed dynamic line charts with Chart.js to illustrate trends in China's economic history and highlight key incidents impacting its economy
- Integrated interactive features: selectable bars, annotations, story buttons, images, and text
- Backend supports data filtering based on year ranges, and timeline shifts with button interactions
- Visualized China's GDP, per capita GDP, and annual GDP changes from 1961 to 2022

WORK EXPERIENCE

Bank of China   Guangzhou, China
Software Engineer Intern   July 2018
- Developed and optimized the Android payment app "Gathering Wealth" enabling QR code-based payments for retailers
- Implemented an account-to-debit card linking system for direct retailer payments
- Scaled user bases from 3k to over 15k, reduced launch time of this app by 50%