Kunj Patel

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EDUCATION

University of Illinois at Chicago, *Chicago, IL* May 2021

Degree: Bachelor of Science in Computer Science

Relevant courses: Algorithms, Data Structures, Python, Artificial Intelligence, C/C++, Computer Architecture, Networks, Computer Security, Compilers Assembly, Operating Systems, Logic Analysis, Software Methodology

WORK EXPERIENCE

eChemportal Inc – Software Developer, *Texas, USA* May 2021 – Present

- Led the development of a cutting-edge data science project aimed at optimizing pricing strategies for our company's products. The project utilized catalog data from various suppliers, leveraging Python, Pandas, Angular, RxJS, and ngrx to analyze rankings, costs, and profits for each product from each supplier.
  - Employed Python and Pandas to gather and preprocess catalog data from suppliers, ensuring accuracy and reliability in the dataset.
  - Designed and implemented algorithms to calculate optimal pricing based on product rankings, costs, and desired profit margins which were able to set pricing well within range of 20% of supplier pricing and set the company's products into top 5 rankings.
  - Leveraged RxJS and ngrx to manage complex state and asynchronous data flow within the Angular application, ensuring real-time updates and responsiveness.
  - Integrated the pricing optimization algorithms seamlessly into our company's web application using Angular, enhancing user experience and efficiency.
- Developed a program to generate IUPAC and common chemical names from SMILES format using a Python package based on machine learning
- Collaborated with chemistry team to design and build responsive internal applications, integrating front-end frameworks such as React.js, AngularJS and ngrx with back-end technologies like Node.js and Django.
- Developed ERP and CRM tool for email and order management using Angular and C#.
- Developed a C# program with UI to streamline order data input to QuickBooks using QuickBooks SDK.
- The program utilized order data from a SQL database and presented it to the accounting team for quick visual verification and allowed to sync orders to QuickBooks with 1 click saving hours of daily resources and minimizing payment errors leading to great customer experience.
- By leveraging the NIH database, the program was able to determine which chemical compounds were restricted by the FDA and the government, eliminating them from search results to ensure regulatory compliance.
- Managed email-related services to send quotes up to 500 customers simultaneously and created a fully functional portal in collaboration with the UI development team.

University of Illinois at Chicago – Teaching Assistant, *Chicago, IL* Jan 2019 – Dec 2020

- Facilitated 20+ workshops and discussions to help 40+ students with courses in Computer Science.
- Developed 5 tutorials on how to write computer programs and solve engineering problems.

PROJECTS

Amazon - Full Stack, Independent Project May 2021 – June 2021

- Utilized Next.js, Tailwind CSS, Fakestore REST API for demo data on the responsive page of the Amazon clone.
- Utilized the search function to define the shortest path and updated the code to increase the efficiency by 30%.
- Implemented Stripe.js to simulate purchases made on the Amazon clone. Used Firebase as a backend server to handle checkout and Post requests to Stripe.com.

Durango, A Simple Server Monitoring Tool Jan 2021 – Feb 2021

- Built a small-scale version of system monitoring with 5 functionalities using sockets, multithreading, WakeOnLan (WoL) and ping. Functionalities included: Sending magic packets to wake up server, native push notifications in case a server goes offline, pinging using IP or web address, monitoring multiple servers simultaneously in the background.
- Developed using React Native for support 2 major operating systems (Android and iOS) with a single code base.

Flights, A Travel Reservation Website at University of Illinois at Chicago Oct 2019 – Dec 2019

- Created a website that allows users to view or make flight reservations for 1000+ flight schedules using HTML/CSS, Java, JavaScript, and MySQL.
- Developed efficient test strategies to verify website, collected and modified data to improve user experience by 20%.

- Hosted the website using AWS S3, MySQL workbench and AWS RDS for related functionalities. Stored data in MySQL database and modified it along with selected payment options.

TECH SKILLS

Computer Science:	Distributed, Multi-tiered systems, Algorithms, Linear programming, Nonlinear optimization
Programming:	Java, C, C++, C#, Python (NumPy, Pandas, SciPy), HTML, CSS, JavaScript, XML, Git, MATLAB
Databases:	Relational databases, SQL server, MySQL, MongoDB, Google Cloud, AWS, Microsoft Azure
Systems:	Unix/Linux, UI Enhancement
Data Visualization:	Tableau, Power BI, WordPress, Microsoft Office (Word, Excel, Access, PowerPoint)
Statistical Inference:	A/B Testing, Hypothesis testing, Probability, Confidence intervals, Forecasting, Regression