Hayden Kim

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EDUCATION

University of Illinois at Urbana-Champaign   August 2021 – December 2024
Bachelor of Science in Mathematics & Computer Science
GPA: 3.86/4.00 (**Dean's List Spring 2022, Fall 2022, Spring 2023. Spring 2024)**
Relevant Coursework: Data Structures & Algorithms, Communication Networks, Database Systems, Artificial Intelligence, System Programming, Numerical Analysis, Nonlinear Programming, Computer Architecture, Graph Theory

WORK EXPERIENCES

UnitedHealth Group/ Optum   June 2024 – August 2024
Technology Development Program Intern
- **Implemented streaming data tools with Apache Spark** and **Azure Databricks** under an **Agile environment** to reduce the complexity of streaming data usage for Optum developers
- Enforced thorough **Unit testing, End-to-End testing, and code documentation** to increase efficiency during the project's testing phase and expedite the understanding of the project
- Developed an **advising application using K-Nearest Neighbors and Flask** to simplify the health policies selection process
- Reduced monthly cost of **merging company data through streaming** by about **66%**

Technology Development Program Intern   June 2023 – August 2023
- **Implemented framework migration from Legacy Framework Struts to Spring Boot** in application used for financial transactions between Optum and hospitals
- Documented project details to improve project's learning process for incoming software developers joining the team
- Achieved significant improvement in application's security through web framework migration

PROJECTS

Career Portfolio Website   August 2024 – September 2024
Front-End Developer
- Programmed **portfolio website in React** showcasing who I am, a contact section, and an expanded list of projects I worked on
- Designed dynamic **CSS animations** to increase user engagement as they traverse the website
- Integrated **GitHub Pages functionality** that builds and deploys website from repository

My Job App Tracker   August 2024 – August 2024
Full-Stack Developer
- Designed **full stack application** that simplifies user experience for viewing job applications user applied to
- Utilized **Postman to test MongoDB and Spring Boot backend API** functionality used to store job application data
- Implemented **React frontend** to provide user access to appending and viewing job applications with **backend API interaction**

League of Legends Metrics Viewer   January 2024 – May 2024
Full-Stack Developer
- Developed an **HTML application utilizing Google Cloud Platform database** in a team of four that assists users in identifying which League of Legends Champion to choose using the application's database as well as view previous match data
- Overhauled "dirty" data to ensure smooth data transfer from Google Cloud Platform to the application
- Reduced query runtime on application's **SQL advanced queries** by about 43% using **indexing**

PrairieLearn++   August 2022 – December 2022
Full-Stack Developer
- Developed a **web application utilizing Beautiful Soup web scraping** for my UIUC's online learning platform "PrairieLearn" in a team of four that offers users an easier time in identifying assignment due dates
- Designed **HTML front-end UI** to display available assignment due dates and alert users of upcoming deadlines
- Implemented **Python-backed web service using Flask** to better represent the insights from the scraped data

LEADERSHIP & INVOLVEMENTS

SASE (Society of Asian Scientists and Engineers)   September 2023 – Present
SASE Tech Intern/Outreach Chair/Executive Board
- Coordinated LeetCode and LinkedIn workshops to prepare undergraduates and graduates seeking tech-related careers
- Increased member involvement by about 20% through event collaborations with companies and student-led organizations

University of Illinois at Urbana-Champaign   January 2023 – Present
Statistics 400 Course Assistant
- Designed and finalized statistical course assignment problems for a class of over 400 students
- Led course discussion section of over 25 students, explaining core probability concepts and providing advice for assignments

SKILLS

Languages/Frameworks: SQL, Java, JavaScript, Python, HTML, C++, Scala, Linux, Spring, Spring Boot, Flask, Beautiful Soup
Platforms/Technologies: Agile/Scrum, Apache Spark, Machine Learning, Azure, Google Cloud Platform, GitHub Actions, MongoDB

AWARDS & CERTIFICATIONS

PCAP – Certified Associate in Python Programming   July 2022