

Sudhir Venkat

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Education

University of Michigan - School of Literature, Science, and the Arts

Ann Arbor, MI

Bachelor of Science in Computer Science; Minor in Entrepreneurship

August 2020 - April 2024

- **GPA:** 3.6/4.0
- **Relevant Coursework:** Discrete Math, Programming and Intro to Data Structures, Data Structures and Algorithms, Intro to Computer Organization, Foundations of Computer Science, Web Systems
- **Awards:** Michigan Competitive Scholarship

Work Experience

Lear Corporation

Southfield, MI

Software Engineering Intern

March 2022 - August 2022

- Conducted diligent research and development in order to identify and resolve a major file extraction issue in complex C++ legacy code, allowing over 120 in-house users to regain a significant amount of functionality and maximize their productivity
- Delivered over 30 tickets towards configuring an off-the-shelf project management software, ultimately assisting the seating and e-systems divisions in moving projects ahead toward completion
- Designed and implemented 2 automated protocols for data downloads and uploads using Python, streamlining data management processes and increasing the efficiency of what were once time-consuming operations
- Led a 12-person team of interns in researching options for the company to retain talented young employees and delivered a presentation to stakeholders on how the company could vie for these employees and remain competitive in the market

Humworld Inc.

Wixom, MI

Software Engineering Intern

May 2021 - August 2021

- Wrote almost 50 unit test cases, improving the reliability and quality of the company's chronic care management software
- Tested 5 Bluetooth medical devices thoroughly in order to identify possible bugs and provide valuable feedback on possible causes and fixes to the development team, leading to increased reliability of the company's core products and services
- Secured 4 additional customers through comprehensive product demos, contributing over \$10,000 toward revenue growth

Projects

Instagram Clone(JavaScript, Python, SQL, HTML, CSS)

- Created a responsive interface using JS and React, implementing features such as login, post interactions, and user accounts
- Utilized Python libraries such as Flask and SQLite to create a REST API to interface with our SQL database
- Hosted the website using AWS and utilizing their EC2 service along with Gunicorn and Nginx services

Relational Database(C++)

- Designed and developed a relational database that efficiently supported operations such as search, insertion, and deletion
- Conducted analysis of various data structures and hashing methods to identify the most efficient solution for operations
- Created a method to merge multiple databases and resolve conflicts seamlessly

Message Board Organizer(C++)

- Developed a program that utilized natural language processing and machine learning techniques to organize posts on a simulated message board interface
- Built a robust backend using data structures such as binary search trees
- Implemented fast recursive algorithms for operations such as for searching and insertion to complete tasks efficiently

Technical Skills

- **Programming Languages:**
 - Proficient: Java, C, C++, Python, R
 - Experienced: JavaScript, HTML, CSS, SQL, TypeScript, LaTeX
- **Other Skills:** Git, Agile Development, Siemens Teamcenter, AWS, MS Sharepoint, MS Office