

Soham Shirish Raut

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Education

University of Washington, Seattle

Expected Graduation: June 2025

Bachelor of Science in Computer Science

- Junior at the Paul G. Allen School of Computer Science and Engineering, GPA: 3.90
- Awarded Dean's List in all quarters since Autumn 2021
- **Relevant Coursework:** Data Structures and Algorithms, Parallelism, Hardware/Software Interface, Discrete Math and Probability, Automata Theory, Data Analytics, Web Development, Linear Algebra

Experience

Candent Technologies Pvt. Ltd. | Software Engineer Intern

July 2023 - Present

Pune, Maharashtra, India

- Improved the candidate hiring management system to streamline the candidate hiring process by devising a candidate ranking system to rank candidates against a job based on skills and project data.
- Worked with a team of developers on a full-stack event planning and organization app in a scrum-based environment using Next.js, MongoDB, and Google APIs.
- Established a strong background in writing test code for applications, and providing insight into the opportunities for future product and business development.

Projects

ML Modeling: COVID-19 Hospital Capabilities | Python Machine Learning Project

March 2023

- Devised 3 machine learning time-series models using TensorFlow in Python achieving 81% accuracy in predicting hospital bed availability during the COVID-19 pandemic.
- Conducted exploratory data analysis on the dataset provided by the Department of Health and Human Services, after trimming the dataset and performing principal component analysis.
- Increased the efficiency of the model by using an upper-triangular matrix to discover correlations above 90% between columns, then applied the ARIMA model, along with neural networks like CNN and RNN

ThriftEats | Winner of DubHacks Next Most Commercially Viable Prize

October 2022

- Developed a full-stack website aiming to minimize spending by suggesting recipes based on current deals, and streamlining the grocery budgeting and shopping process.
- Learned and utilized Figma to design web pages, and implemented a JavaScript back-end to fetch coupon details and other relevant information from third-party APIs.
- Integrated the JavaScript back-end with a front-end React interface, and designed a recommendation system for recipes to maximize ingredient deals to achieve the lowest possible spending.

Extracurriculars

Washington Hyperloop | Controls Team Software Engineer

November 2022 - Present

- Worked with a team of engineers and developers to craft a robotic navigation system for a Tunnel Boring Machine built for the Not-A-Boring Competition.
- Implemented a data processing system in Python to process navigation sensor data, performed simulations in different environmental conditions to test the machine, and devised failure procedures.

Technical Skills

- **Programming Languages:** Python, Java, JavaScript, TypeScript, HTML/CSS, SQL, RStudio, C, Matlab
- **Frameworks/Libraries:** NumPy, Pandas, Scikit-Learn, TensorFlow, Node.js, React, Bootstrap, D3.js, Next.js, TailwindCSS
- **Technologies:** Git, Linux/Ubuntu, Vim, Unity, REST API, Figma, Arduino