Svadrut Kukunooru

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EDUCATION

University of Wisconsin – Madison   Madison, WI
Bachelor of Science in Computer Science, Minor in Data Science   *Aug. 2021 – December 2024*
- **Relevant Coursework**: Machine Organization, Data Modeling, Linear Algebra, Discrete Math, Artificial Intelligence, Algorithms

EXPERIENCE

SkyWater Technology Foundry   May 2023 - August 2023
Software Engineering Intern   *Bloomington, MN*
- Redesigned semiconductor wafer viability testing algorithms in C including a wafer parser and a die test site selector, leading to a 4% increase in global testing efficiency
- Designed multiple selection algorithms to uniformly select different parts of the die based on radius and number of sites required
- Gained knowledge of fab processes like lithography, etching, and wafer testing
- Learned to use OCAPs to track project progress and improve manufacturing processes

The Headstarter   June 2022 - September 2022
Fellow   *Queens, NY*
- Developed projects from design to deployment using MVC design patterns, such as a resume parser and a job board for recruiters
- Coached by engineers on CI/CD, Git, Agile, and microservice patterns

Sammamish Coding Club   Sep. 2018 - February 2019
Tutor   *Sammamish, WA*
- Educated over 50 students in data structures up to graphs and trees and guided them in a month-long final project where teams of students engineered a Reddit clone using Python
- Assessed and troubleshot computer problems brought by students, such as hardware issues and software bugs

PROJECTS

StoreIt | *Python, Flask, HTML/CSS/JS, SQL*   November 2022
- Led a team to develop a full-stack web application with a Python back-end that allowed users to sort through a list of storage spaces and message owners of spaces that interested them; additionally included a Sign-Up/Login database accessed through SQLAlchemy
- Split tasks among the 4 other members of my team and ensured that developers achieved their respective tasks to a satisfactory degree; created the pitch deck for the project
- Placed 4th in the CheeseHacks 2022 hackathon out of over 200 students and scored highest points for presentation

Breast Tumor Analysis | *HTML/CSS, R*   October - November 2022
- Co-authored a study on correlations between breast tumor characteristics and malignancy with a team of 5
- Pulled from a University of California – Irvine dataset on breast tumors containing over 10,000 data points and created relational linear models to compare correlations between radius/perimeter of tumors and its malignancy
- Visualized multiple distribution graphs that illustrated how tumor features were distributed based on their being cancerous; discovered that tumor size and probability of tumor being cancerous were directly correlated
- Verified this correlation with several hypothesis tests including a t-test and z-test

Linux Rice | *Lua, Bash, XML, Python, Java, and more*   July 2022
- Designed widgets for a Linux system that were used by over 150 people and incorporated in their own systems
- Utilized multiple languages, code bases, and interfaces to create a cohesive system that followed the Unix philosophy of modularity and reusability while also having a ~0.3s runtime

SKILLS

Programming Languages: Java, Python, C/C++, JavaScript, HTML/CSS, SQL, R, Bash
Developer Tools: AWS, Git, Google Cloud Platform, VS Code, Visual Studio, PyCharm, IntelliJ, Eclipse
Other Interests: Cello (12 years), Carnatic Cello (3 years), Badminton, Skiing, Cooking, Fencing