

# Svadrut Kukunooru

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## EDUCATION

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### University of Wisconsin – Madison

Madison, WI

*Bachelor of Science in Computer Science, Minor in Data Science*

*Aug. 2021 – May 2024*

- **Relevant Coursework:** Machine Organization, Data Modeling, Linear Algebra, Discrete Math, Artificial Intelligence, Algorithms

## EXPERIENCE

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### 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 troubleshooted computer problems brought by students, such as hardware issues and software bugs

## PROJECTS

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### 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

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**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