500 W Pitkin Street, Fort Collins, Colorado 80521 Phone: 970-294-6988 | Email: ritwikv@rams.colostate.edu

EDUCATION:

Colorado State University, Fort Collins, CO Major: Electrical Engineering GPA: 3.24 Minor: Mathematics **Expected Graduation May 2022** Courses: Introduction-Microprocessors, Intro to Project Proposals, Antennas and Radiation, RT Applied Nonlinear Control Systems, Opt. Int. & Laser Metrology, Embedded Machine Learning

SKILLS:

Software: Proficient in Eagle, OrCAD, Cadence, Waveforms, Google Colab •

Computer Language: Experience with Assembly Language, Python, Java

Certifications:

2021 AT&T Summer Learning Academy Extern

WORK EXPERIENCE:

Resident Assistant

Colorado State University, Fort Collins, CO

- Demonstrated strong problem solving and conflict resolution skills through mediations
- Collaborated with a team of RAs to conduct inclusive activities with organizational skills •
- Built relationships with empathy and through one-on-one interactions with residents

DevOps Engineer Intern

- Visteon Corporation, Belleville, MI Performed Root Cause Analysis (RCA) for some non-critical issues.
- Reduced Jenkins Artifactory upload package by 50% to accommodate customer needs.
- Reflashed Clusters and worked on analyzing virtual machine speed to distribute load between slaves •
- Improved Virtual machine load balancing which increased the throughput by at least 5 builds per day

Embedded systems Intern

- Mahindra Electric Mobility, Bengaluru, India
- Created PCB Designs using Eagle and Analysed Schematics using OrCA
- First-hand experience on the main phases of the product development cycle: Design, Build and Quality by visiting and • personally learning from professionals dealing with each sector
- Learned about cost management, product management, and production in manufacturing a car and industry software

ENGINEERING PROJECTS:

Senior Design Project- Rambots(Early Development) Create project proposal, project plan, budget, and timeline

Research different versions of pre-existing Bipedal, Quadruped robot designs

Radar Prediction and Missing Data Inpainting Using Machine Learning

- Developed the model in python to predict the weather for a day ٠
- Develop a Machine Learning model that predicts weather using satellite images
- In-paint missing data using deep learning

Cricket Player Analysis

- Analysed player's performance against a particular team or another player
- Used Kaggle data set and stored the data into parseable CSV format
- Developed multiple scripts for data pre-processing, generating player statistics and plotting data
- Created visual representations using matplotlib library in python

Gesture Controller

- Developed a gesture control system to control music on a speaker
- Developed hardware using LDRs, resistors, Breadboard, and software using Arduino
- Tested different schematics to identify the most efficient design
- Used Waveforms software to detect the change in voltage caused by movement over LDRs. Mapped these changes to 6 different commands

Liquid level Sensor

- Determines the current liquid level in a container and displays the results on a Nokia display
- Developed in Assembly Language using TM4C123G Microcontroller
- Multiple sensors used to aggregate data and an ATD converter is also used to get real time reading

Touch Lamp

- Assembled all the Hardware components like Relay, Arduino in the interactive base of the Touch Lamp
- Generated waveforms for the capacitive touch output under different scenarios Achieved a response time of 0.83 sec with a maximum distance of 7 cm

August 2019- December 2019

June2021- August 2021

January 2020 - Present

June 2021- August 2021

August 2021- Present

June 2019- July 2019

June 2021- Present

January 2020- May 2020

January 2021- February 2021

August 2018- December 2018