

Pradyun Narkadamilli

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Education

University of Illinois, Urbana-Champaign,

2021 – exp. 2025

Sophomore, B.S in Computer Engineering

Relevant Coursework: Digital Systems Lab (in progress), Analog Signal Processing (in progress), Computer Systems and Programming, Physics E&M, Computational Linear Algebra, Thermodynamics, Quantum Physics, Calculus III

GPA: 4.0

Professional Experience

Student Researcher, WaggleNet

2021 – Present | Champaign, IL

- Created datalogging software to aggregate data from independent Raspberry Pi Zero data collection nodes
- Designed data schema and implemented data pipeline for use with AWS Dynamo DB
- Coordinated small team designing image processing/computer vision software for motion detection applications

Captain, VEX Team 3304R

2019 – 2021 | Dublin, CA

- Designed robot based on the constraints of the game. Was primary builder and programmer.
- Programmed robot's movement with PID and Odometry techniques as team lead.
- National and State Championship Qualifiers as first year team of 5 people

Project Work

Vital

Uses soil moisture, temperature, and humidity data to inform gardeners of plant health.

- Collected data using an Arduino, and used a Raspberry Pi to manage that data on Firestore
- Interfaced this data with a website, Android App, iOS app, and Google Assistant Routine

Kami

Uses Machine Learning to scan and summarize text documents with cross-platform support.

- Used PyTesseract OCR engine to read text from images, then uses NLTK model to summarize text
- Used Angular.js to make a web application, and Flutter to make a cross-compiling native application
- Set up/administrated EC2 Linux server on AWS with Nginx, Gunicorn to serve backend Flask API

Skills

Programming Languages

Python, Java, JavaScript, Rust, C, C++, SQL

Programming Frameworks

React, Flask, Next.js, Actix-web, Platformio

Other Utilities

Linux Systems, AWS, GCP, Git/Github, Firebase

Awards

Dean's List, Grainger College of Engineering

2022

Ranked within top 20% of students in the Grainger College of Engineering

Also awarded in Fall 2021

Winner, Samsung Solve for Tomorrow, Samsung

2020

Competed as part of XREdu Club. Devised an information net that took temperature, smoke, and humidity data from arduino 'nodes', then used ML to detect/predict the path of a fire. Earned \$100,000 in prize.

National Quarterfinalist, VEX Robotics CREATE US Open

2019

Reached the Round of 16 at VEX national championships among 11,000 US-based VEX teams.