

# Pradyun Narkadamilli

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## Education

**University of Illinois, Urbana-Champaign,**

2021 – exp. 2025

Sophomore, B.S in Computer Engineering

**Relevant Coursework:** Analog Signal Processing, Quantum Information/Computing, Computer Systems and Programming, Physics E&M, Linear Algebra

**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 [Native], Flutter, Flask, Next.js

### 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.