

# VINDHYA RAVI PRAKASH

## SOFTWARE ENGINEER

### CONTACT

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### EDUCATION

#### M.S. in Computer Science

[GPA: 3.77]

Syracuse University (SU)

[Syracuse, NY]

Aug 2019 – May 2021

#### B.E in Information Science and Engineering

Visvesvaraya Technological  
University, B.N.M.I.T

[Bangalore, IN]

Aug 2013 – June 2017

### TECHNICAL SKILLS

#### Programming Languages

Python, TypeScript, Java, C, Go

#### Web Technologies

React, React Native, Node.js,  
Express, ES6, WebPack, Babel,  
Django, HTML, CSS, PHP,  
Apache Tomcat

#### Database

MySQL, PostgreSQL, InfluxDB,  
MongoDB (noSQL), GraphQL

#### Tools & Platforms

Git, GitHub, Android, Linux, AWS,  
Docker, Jenkins, Grafana, Heroku

#### Software Development

Data Structures, Unit Testing,  
Object Oriented Design, Agile,  
Full Stack

#### Machine Learning

Regression, Classification, NLP,  
Clustering

### EXPERIENCE

#### Software Engineer @Hewlett Packard Enterprise, New York, NY

Jun '21 – Apr '23

- Responsible for the **maintenance and release of 5 HPE supercomputer systems** in the High Performance Computing department, with a current focus on improving development velocity, reducing build times and reducing deployment times through end to end automation processes using Jenkins.
- Performing code reviews, root cause analysis for critical issues, implementing, testing, and reviewing solutions to **support 50+ customers using the HPE supercomputer systems**.

#### Full Stack Engineer Intern @Hewlett Packard Enterprise, New York, NY

May '20 – Aug '20

- Developed a web app for HPE's Analytics **Tool Repository** using React, Django, and PostgreSQL, **enabling developers to compare data visualization tools**, with potential extension to other managed services like databases and ML algorithms.

#### Volunteer Research Assistant, ML @Syracuse University, Syracuse, NY

Aug '20 – May '21

- Assisted Dr. Soundarajan with a **new data imputation technique that uses active learning** to fill missing values in datasets, thus improving accuracy and reducing bias of the trained model.
- Implemented the algorithm using **Lasso Regression** to identify crucial features and **KNN imputer**, variance & accuracy to score the missing instances in those features. Obtained an **MSE of 5.46**.

#### Research Engineer @Indian Institute of Science (IISc), Bangalore, IN

Sept '17 – Jan '19

- Developed an **IoT system for monitoring lab conditions at IISc** with real-time data visualization, and redesigned the Integrated Circuit Packaging Lab website, **increasing traffic by 20%**.

### PROJECTS

#### DishInsight - Menu analysis, dish reviews, and dietary guidance app

Oct '24 – Dec '24

- Created (and deployed) a cross-platform app where users can **take photos of a restaurant menu and get insights into specific dishes based on online reviews**.
- Used OpenAI's GPT-4 for **advanced menu analysis**, offering in-depth insights into ingredients, dietary classifications, and taste profiles through effective prompt engineering.
- Leveraged Retrieval-Augmented Generation (RAG) with PerplexityAI for **real-time, context-aware dish reviews** using cutting-edge LLM, fine-tuning prompts for accuracy & relevance.

#### Alphabite - Nutrition tracking and grocery replenishment app

Aug – Dec '20

- Developed a full stack cross-platform app using **React Native** that enables users to **enhance personal care by tracking groceries, analyzing nutritional intake, and exploring healthy recipes**.
- Nutrition**: Designed and implemented a database in **Firebase** that store users' daily nutritional information to help users analyze and set diet goals.
- Inventory**: Leveraged the **Image Recognition feature from Google Cloud's Vision API** to detect and **classify food with 90% accuracy**, resulting in a significant UX improvement.
- Recipes**: Integrated Spoonacular's API that utilizes an **Ingredients-to-Recipe Matching algorithm** to recommend healthy recipes based on the inventory captured.

#### TextTrim - Summarizer for meetings and articles

Mar – May '21

- Collaborated to develop a full stack web application that **summarizes text or files** using 9 summarization techniques (both abstractive & extractive) and **evaluates the summary based on 4 different metrics**. Delivered an **average summary score of 0.7** across all techniques.
- Created an efficient and scalable multithreaded backend/pipeline using **Django** to handle requests, validate & store user input, and clean up user sessions.
- Designed a frontend UI using **React** that provides options to select a specific summarization algorithm and displays the summary with its evaluation. This was beneficial to document various online sessions held during conferences at Syracuse University.