# Sandilya Kambhampati

Fishers, Indiana
463-206-9053 | kprsandilya@gmail.com | linkedin.com/in/kprsandilya/ | github.com/kprsandilya

## Education

**Purdue University** **August 2023 – May 2027 (Expected)**
*B.S. in Computer Science & Data Science, Minors in Math & Statistics (3.98 GPA)* *West Lafayette, Indiana*

## Experience

**Cummins Inc.** **July 2025 – Present**
*Software Engineering Intern* *Remote*

- Developing a company-specific transformer in Python to interpret customer messages and retrieve relevant products
- Created auditing dashboards and built automations in Jira to streamline intake workflows and improve project visibility
- Conducted audits and developed internal company pages to enhance usability and improve accessibility of resources

**Indiana State Department of Health** **May 2025 – July 2025**
*Viral Hepatitis Intern* *Indianapolis, Indiana*

- Created address lookup system to automate 150,000+ data entries with an Apache server containerized using Docker
- Used Selenium to enter thousands of lab details into the National Electronic Disease Surveillance System (NEDSS)

**Bureau of Cyberspace and Digital Policy, U.S. Dept of State** **September 2024 – May 2025**
*Policy Intern* *Remote*

- Collaborated with U.S. diplomats on initiatives advancing U.S. cyber and digital policies globally
- Contributed to global cybersecurity awareness campaigns and diplomatic efforts to counter cyber adversaries
- Conducted open-source research and analysis to support the development and implementation of U.S. digital policies

**Texavi** **June 2024 – August 2024**
*Software Development Intern* *Remote*

- Built a dynamic WordPress CMS for a UK archery organization to support easy updates and user engagement
- Improved website structure, layout, and navigation to enhance overall usability, accessibility, and user experience
- Implemented email management strategies to streamline communication with customers and improve outreach efficiency

## Projects

**Tradify** | *Alpaca, PostgreSQL, WebSockets, Matplotlib* **August 2025 – Present**

- Implementing a multi-component trading pipeline, including a continuously running data collector to fetch live price, news, and sentiment data from APIs, store it in a SQL database, and update an in-memory cache for fast access
- Developing a signal generator and trading engine to generate buy/sell/hold signals based on a custom-trained ML model, apply risk management rules, and execute trades via Alpaca, while logging trade results and updating portfolio status

**AI-Driven Nurse Assistant** | *React Native, FastAPI, LangChain, PostgreSQL* **August 2025 – Present**

- Developing a dynamic NLP pipeline using LangChain and Ollama with Pydantic-based parsing and GPU acceleration to efficiently extract structured sentiment data from nurse feedback and generate actionable managerial recommendations
- Building a FastAPI backend with a PostgreSQL database and a React Native/Next.js dashboard, enabling managers to visualize sentiment trends and prompt the AI to execute workplace improvements based on managerial queries
- Implementing a modular, containerized architecture using Docker and Cloud Run (GPU-enabled) to separate frontend, backend, AI inference, and database storage layers for scalable, secure, and maintainable deployment

**ReciPic: AI-Powered Recipe Finder** | *React, Pytorch, Flask, Firebase, Gemini* **April 2025**

- Built an ingredient-recognition pipeline using computer vision to identify food items from user-uploaded images using a custom-trained YOLOv8 model, storing the outputs to Firebase Storage.
- Integrated Gemini to produce recipes and infer additional needed ingredients from partial fridge inventories.
- Combined ML outputs with Walmart's platform to auto-purchase missing ingredients through a Chrome extension.

**Ports** | *Python, Java* **Februrary 2025 – May 2025**

- Researched portfolio risk calculation methods for Ports, a fintech startup for investing in user-generated portfolios.
- Developed a risk quantifier and implemented tests to optimize portfolio performance using the Central Market Line.
- Built a model incorporating gradient-descent logic to maximize the Sharpe ratio, integrating additional risk measures.

## Technical Skills

**Languages**: Python, Java, C, HTML/CSS, Javascript, GDScript, R, Typescript
**Technologies/Frameworks**: ReactJS, NextJS, React Native, Tailwind, Pytorch, Bootstrap, GitHub, Linux
**Certifications**: GIAC Foundational Cybersecurity Technologies, AT&T 2024 Technology Academy, Akuna Options 101