Praval Kollipara

Frisco, TX | linkedin.com/in/pravalk/ | 408-718-7731 | pravalk19@gmail.com | github.com/pkollip

EDUCATION

Purdue University (West Lafayette, IN)   *Estimated Graduation: December 2024*
Bachelor of Science: Computer Science and Data Science   GPA: 3.78/4.00
Minors: Political Science and Entrepreneurship

- Organizations: Purdue Student Government, BoilerBlockchain, Mortar Board Senior Honor Society
- Classes: Programming in C | Algorithms | Computer Architecture | Systems Programming | Machine Learning | Statistics and Probability | Information Systems | Large Scale Data Analytics | Artificial Intelligence
- Awards: Dean's List and Semester Honors (x6), Proclamation from City, 1st Place JMEC Competition

WORK EXPERIENCE

Bristlecone (Dallas, TX)   *June 2024 - August 2024*
Machine Learning Intern

- Implemented visual object detection Python scripts for 2 LLMs -Gemini, Llama using LangChain- to identify electrical components.
- Applied prompt engineering techniques to system prompts improving detection accuracy by over 10%.
- Researched AI-driven decisions and Generative AI in the Supply Chain industry by reading 12 research papers.

Eaton (Peachtree City, GA)   *May 2023 - August 2023*
Software Engineer Intern

- Interfaced with 4 core Eaton APIs to remotely test Smart Breakers -home energy manager.
- Wrote 10+ Python test cases to test APIs for the Eaton Smart Breaker increasing code coverage by 5%.
- Earned familiarity with Agile methodology to drive collaborative project development and regular sprint cycles.

Wyzant (Remote)   *August 2021 - May 2023*
Academic Tutor

- Delivered a tutoring experience to students in grades K-12 on various academic subjects -Calculus, Physics, and SAT.
- Gained 39 5-star reviews after 80+ hours of tutoring.

PROJECTS

Pete's House   *May 2024 - Current*
An exclusive Purdue Marketplace for students to buy/sell tickets, clothes, textbooks, etc.

- Constructing front end using React.ts, Vite, and Tailwind CSS.
- Building back end utilizing Python, Flask, PostgreSQL, SQLalchemy, Docker, and Gunicorn.
- Implementing Two-Factor Authentication to verify Purdue students using Purdue University SSO.
- Secured $6,000 in funding from SVBIG, a Purdue-based venture capitalist group.

Edict
An LLM augmented live lecture resource for students/teachers.   *December 2023 - Current*

- Co-founded an Ed-tech startup utilizing upcoming tech in LLMs through Retrieval Access Generation (RAG).
- Developed 3 microservices -for LLM inference, live transcription, and chat.
- Spearheaded talks with Purdue University faculty to pilot software during CS lectures.

Tree Coverage and Climate Change   *August 2023 - December 2023*
A K-Nearest Neighbors Approach.

- Formulated a KNN Model to categorize the 50 U.S. states based on tree coverage to mitigate climate change.
- Innovatively bootstrapped training data for 5 states, employing in-depth analysis from various research papers.
- Conducted to a deeper understanding of ecological data about climate change mitigation efforts in the U.S.

Reinforcement Learning Undergraduate Research   *June 2022 - December 2022*

- Investigated implementation of Decision Transformers in Mathematics and Technology.
- Led under supervision of Purdue professor - Vaneet Aggarwal.

LEADERSHIP EXPERIENCE

Purdue Student Government (West Lafayette, IN)   *August 2021 - May 2024*
Chief of Staff

- Supervised 9 committees with over 10+ members, each serving a unique facet of student body.
- Facilitated and lead collaborative discussions with 100+ members bi-weekly.
- Orchestrated 10+ large-scale sustainability-themed events each year bringing in 1,000+ students.

SKILLS

Skills: Python | Java | JavaScript | HTML/CSS | C | C# | C++ | SQL | Linux | Flask | REST | React.js | Docker | TypeScript | JSON | .NET | MySQL | OOP | Git | Django | Agile | Scrum | AWS | LLMs | Bash | LangChain