Kishlai Pandey

650-430-3787 | kishlaipandey@gmail.com | linkedin.com/in/kishlai | github.com/kishlaipandey

Education

Purdue University August 2021 - May 2025

*Bachelor of Science in **Computer Science*** *West Lafayette, IN*

- Concentration(s): **Software Engineering**, **Machine Learning**
- **Dean's List & Semester Honors**

Experience

Undergraduate Teaching Assistant August 2024 – Present

Purdue University *West Lafayette, IN*

- Guide 75+ students weekly in labs and online, streamlining support processes to improve response times
- Partner with 60+ staff to manage and deliver curriculum for 500+ students, ensuring seamless administration
- Evaluate 5+ programming assignments weekly, delivering targeted feedback to enhance code quality and problem-solving skills

Software Engineer Intern June 2024 – August 2024

Albertsons *Pleasanton, CA*

- Developed an OpEx and CapEx forecast model using Python and Excel, leveraging linear regression and seasonality factors on 500K+ data points to achieve under 5% prediction error, significantly improving budgeting accuracy
- Implemented comprehensive queries to automate multi-source data aggregation, reducing financial analyst turnaround time by 50%
- Automated the CI/CD pipeline with GitLab, reducing deployment time by 30%
- Engineered a robust data-cleanup Python script for managing employee list, accurately mapping 1500+ resources, reducing processing time by 80%

Software Engineer August 2021 – May 2023

Hack the Future Purdue *West Lafayette, IN*

- Developed Python-Flask and MySQL microservices to handle data analysis and data validation
- Designed NoSQL and SQL database schemas for MongoDB and MySQL resulting in a 20% improvement in data retrieval efficiency
- Implemented 30+ endpoints for RESTful APIs utilizing Node.js, Express.js, and Mongoose, supporting user authentication and user management CRUD operations
- Utilized React and Material Design to create an intuitive interactive map front-end, resulting in a 20% increase in user engagement
- Leveraged AWS Lambda and Docker to deploy applications, decreasing overall deployment time by 35%

Projects

AI-Driven Student Planning Platform | *JavaScript, NoSQL, Express.js, MongoDB, Node.js, Next.js, Vercel, Docker*

- Engineered a RESTful API with 50+ endpoints supporting user authentication, calendar functionality, and other planner features
- Leveraged Google Maps and OpenAI API, integrating location tracking and voice-activated AI assistant features
- Implemented 30+ unit and manual test cases for back-end and front-end endpoints, ensuring maximum coverage

Artwork Classification Convolutional Neural Network | *Python, NumPy, Pillow, TensorFlow*

- Engineered a 50-layer Python-based CNN designed to discern artwork based on its respective genre
- Implemented different neural network architecures and data sets to optimize model accuracy by 25%

Myoelectric Hand Prosthesis Software | *C++, Python, LibEMG, NumPy*

- Implemented a C++ finite state machine architecture on the ESP32 platform
- Developed a data analysis module using Python, optimizing overall motor movement efficiency by 30%

Voice Activated Virtual Assistant | *Python, gTTS, PortAudio, SpeechRecognition*

- Leveraged Python and 10+ libraries to develop an Amazon Alexa clone with responsive front-end rendering
- Integrated weather, news, and additional APIs to enable real-time data retrieval for prompt dynamic responses

Skills

Languages: Java, C, Python, C++, SQL, JavaScript, TypeScript, HTML/CSS
Technologies: Flask, Node.js, Express.js, React, MySQL, MongoDB, PyTorch, TensorFlow
Tools: Git, Docker, Postman, AWS, Azure, FireBase, Linux, Jira, Notion, Excel, PowerBI, GitLabs, GitHub, DagsHub