KALYAN SALKAR

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EDUCATION

Purdue University   **West Lafayette, IN**
Bachelor of Science in Computer Engineering   **August 2020 – May 2024**
Minor in Management | Data Science Certificate
- GPA: 3.83/4.0
- Dean's List with Semester Honors for 6 semesters

RELEVANT SKILLS

Coursework:
- Data Structures and Algorithms in C
- Into to AI and Machine Learning
- Software for Embedded Systems
- Python, Data Science and Statistics
- Object Oriented Programming
- Game Theory
- Natural Language Processing
- Linear Algebra

Programming Languages and Tools: Python (PyTorch, TensorFlow, Pandas, SciPy), R, C, C++, Java, MATLAB, SQL, AWS, Palantir Foundry, Terminal, Linux, Bash, Docker, PowerShell, JupyterLab

Project Management: Git/GitHub, JIRA, Confluence

PROFESSIONAL EXPERIENCE

Panasonic Energy of North America (Tesla Gigafactory)   **Reno-Sparks, NV**
Digital Transformation Intern   **May 2023 – August 2023**
- Developed image classification model with TensorFlow to identify and classify defects in batteries.
- Improved existing contour detection algorithm to correctly measure battery specifications.
- Productionized classification and detection pipelines to save the company $280,000 annually.

Purdue Aerial Robotics Team (PART)   **West Lafayette, IN**
Research and Development Engineer   **September 2022 – Present**
- Incorporated open-source APIs to create a tool to transcribe audio input.
- Designed Python code using TensorFlow for drones to identify potential hazards at a scene of a fire.
- Co-authored a research poster on how drones can be used to enhance the Emergency Response System through Computer Vision and Speech-to-Text Transcription.

Purdue IIS Research Lab   **West Lafayette, IN**
Research Assistant (Natural Language Processing)   **September 2022 – Present**
- Developed a tool for knowledge extraction from research papers.
- Implemented the Grobid API using Docker to convert PDFs to ordered and formatted XML files.
- Modified Python code of the open-source s2orc parser to convert the XML files to formatted JSON files.
- Web-scraped open-source websites to expand knowledge base to train software entity recognition model.

Persistent Systems   **Goa, India**
Machine Learning Scientist Intern   **May 2022 – August 2022**
- Implemented Federated Learning (FL) for image classification using PyTorch on medical imaging datasets to over 90% accuracy, using Azure as a platform for the federated setup.
- Designed Python code combining FL with Natural Language Processing (NLP) for medical text classification to help with diagnosis.
- Achieved F1 scores up to 0.97 for multi-class and binary text classification using DistilBERT and FL.

PROJECTS

PropertyManager.ai (Hacklytics Hackathon at GeorgiaTech)   **Atlanta, GA**
Machine Learning Scientist   **February 2024**
- Deployed a website called PropertyManager.ai that provides an assessment of the condition of the house for insurance claims, based on images and text description provided by the user.
- Integrated BLIP (Bootstrapping Language-Image Pre-training) model into the backend of the website for image-text retrieval in relation to the images and description provided by the user.

CERTIFICATIONS
- Palantir Foundry Data Engineer
- Lean Six Sigma Yellow Belt