Sai Paladugu

 github   linkedin   portfolio   Saichandan03@gmail.com

EDUCATION

Carleton University December 2025
Bachelor of Computer Science (Honours), Minor in Math *GPA: 3.95/4.0*
- **Relevant Courses:** Artificial Intelligence, Machine Learning, Reinforcement Learning, Database Management, Data Structures and Algorithms, Statistics, Linear Algebra, Computer Vision

EXPERIENCE

Nokia | *Machine Learning Intern* May - Current
- Developed and deployed ML models using Python and TensorFlow to analyze network performance; built data preprocessing pipelines and optimized neural network architectures, increasing efficiency by 20%
- Designed and implemented end-to-end pipelines for LLM model evaluation and deployment, leveraging Apache Airflow for streamlined orchestration and scalability
- Developed a Kubernetes-managed web scraping framework, packaged with Docker, to automatically source and validate cutting-edge LLM models from HuggingFace for integration into Nokia's AI ecosystem

Cisco | *Machine Learning Intern* Sept - Dec 2023
- Developed a predictive ML model leveraging SVMs and k-fold cross-validation to classify support ticket urgency, ensuring robust performance at 85% accuracy and cutting resolution times by 30%
- Created an API using LLMs for processing natural language queries in Elasticsearch; adapted by 12+ Cisco teams
- Enhanced Python pipelines for automated data preparation and feature extraction, streamlining machine learning model development and conserving developer resources

Cisco | *Full-stack Development Intern* May - Aug 2023
- Led the development of an internal Docusaurus-based knowledge hub, integrating NLP-driven recommendations for personalized content discovery and enhanced user engagement
- Engineered a backend API incorporating automated machine learning pipelines to classify, rank, and streamline content releases, reducing manual intervention and boosting operational efficiency

Carleton University | *Linear Algebra Teaching Assistant* Jan - Apr 2023
- Delivered lectures and tutorials to reinforce key mathematical concepts, enhancing students' understanding of abstract data transformations relevant to data science and machine learning

Actua | *STEM Outreach Instructor* Sep - Dec 2022
- Traveled across the city teaching underprivileged kids about CAD software, block coding, and other topics
- Conducted a weekly Arduino programming seminar for high school students interested in engineering, providing hands-on experience with micro-controller programming, project-based learning, and collaborative problem-solving

PROJECTS

Brain Tumor Detection using YOLOv8 ⍟ | *Python, YOLOv8, PyTorch, Computer Vision*
- Implemented a YOLOv8-based deep learning model using PyTorch to accurately detect and classify brain tumors in MRI scans, enhancing diagnostic efficiency and reliability

2048 RL Agent ⍟ | *Python, PyTorch, Reinforcement Learning*
- Developed a Deep Q-Learning agent using PyTorch that autonomously learns and optimizes strategies to achieve high scores in a 2048 game environment

Spotify MoodWave ⍟ | *Spotify Web API, OpenAI GPT, Angular, Node.js*
- Developed an AI-powered, real-time playlist curation platform using Angular for mood-based music selection

SKILLS

Languages: Python, R, Java, C++, SQL, JavaScript, Bash, Scala
Frameworks/Libraries: TensorFlow, PyTorch, Scikit-learn, Keras, OpenCV, Dask, Pandas, NumPy, Matplotlib
Databases/Tools: MySQL, Elasticsearch, Redis, Unix, Git, Docker, Airflow, Kubernetes, Kafka, AWS, Azure