Avi Chauhan
Software Engineer/Data Analyst/Software Developer
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Education

Master of Science, Computer and Information Sciences — Aug 2024 – May 2026 (Expected)
University at Albany, Albany, NY, USA

Bachelor of Engineering, Computer Science & Engineering — September 2020 – May 2024
Indus University, Ahmedabad, Gujarat, India

Professional Experience

Company Name: Silent Infotech Pvt Ltd — Duration:- Jan 2024 to April 2024
Title:- AI/ML Intern

- Worked with Transformer architectures and Large Language Models (LLMs) for fine-tuning and optimizing AI applications, including Retrieval-Augmented Generation (RAG) for handling unstructured data.
- Gained experience in model optimization and deployment using ONNX and TensorFlow Lite, implementing quantization techniques for efficient inference. Developed end-to-end machine learning pipelines, integrating data preprocessing, model training, evaluation, and deployment while ensuring scalability and performance optimization.

Company Name: Opus Technologies — Duration:- June 2023 to July 2023
Title:- Machine Learning Intern

- Worked as Remote Internship Trainee on Machine Learning projects. Utilized and used Pandas, Matplotlib, Scikit-Learn, NumPy, TensorFlow and Keras libraries on assigned modules of different projects.
- Developed, customized and fine-tuned CNN models in classification of plant leaf diseases and lung cancer detection. Performed data preprocessing, model training and evaluation of models to achieve high accuracy.

Academic Projects

Project Name: Online Exam Monitoring System

- Led as a Scrum Leader of 8 members team in Software Engineering to develop an innovative Online Monitoring Exam System using agile methodology, leveraging Computer Vision, React.js, and Express.js to enhance exam integrity.
- Implemented multi-threaded processing to enable real-time video analysis and academic misconduct detection in parallel with user interaction logging, ensuring smooth and efficient monitoring for both students and instructors.

Project Name: Attendance System

- Developed an intelligent Attendance System using Computer Vision and face recognition, seamlessly integrating it with React.js for automated and accurate user identification.
- Engineered a robust tracking mechanism to enhance efficiency and eliminate manual attendance processes, ensuring real-time authentication and reliability.

Project Name: Machine Learning Model Development for Predictive Analytics

- Built models for house price prediction, diabetes classification, and fake news detection using SVM, Logistic Regression, and XGBoost. Employed feature engineering, data pipelines, and model tuning across diverse datasets.

Skills

- Programming Languages: Python, Java, C, C++, Bash, R
- Machine Learning: Regression, Classification, Clustering, Decision Tree, Data Preprocessing, Data pipelines, Model Training and Evaluation, MLOps and MLflow
- Deep Learning & Generative AI: PyTorch, TensorFlow, Keras, CNN Model Development, LLM.
- Natural Language Processing (NLP): Text Preprocessing, Named Entity Recognition (NER), Sentiment Analysis, Transformers, Hugging Face
- Data Analysis & Visualization: Pandas, NumPy, Matplotlib, Scikit-Learn, Power BI, Excel
- Computer Vision: Customizing and Fine-Tuning Models for Image Classification
- Web Services & Frameworks: Human-Computer Interaction, JavaScript, TypeScript, HTML/HTML5, CSS/CSS3, Ajax, React.js, Express.js, Node.js, Visual Studio Code, Redux
- Tools: Git, GitHub, Microsoft Office Suite, Docker, Open-source tools
- AWS Services :- Amazon SageMaker, AWS Lambda, Amazon EC2, Amazon S3, Amazon DynamoDB, Amazon CloudWatch, Simple Email Service, EventBridge
- Data Structures, Algorithms, Operating Systems, Systems Programming
- Database System and Database Management: MySQL, SQL Server.

Certifications

- **AWS Certified AI Practitioner (AIF-C01)** – Scored 933/1000, Validation No: 5289992c1c274ebeafa5aaddeb0c5d35 , covering AI & ML fundamentals, generative AI, foundation models, responsible AI, and AI security & governance.