

SUMMARY

A software engineer with 3+ years of experience in Python development, specializing in deploying and optimizing machine learning models, computer vision, and data science to real-world problems to cater to business needs.

EDUCATION

Columbus State University (Georgia, USA)	August 2022 – Dec 2023
Master of Science in Computer Science (Artificial Intelligence and Machine Learning)	GPA 4.00 / 4.00
L. D. College of Engineering (Gujarat, India)	July 2016 – July 2020
Bachelor of Engineering in Electronics and Communication	GPA 8.38 / 10.00

SKILLS

Technical: Python, Java, R, SQL, SAS, Bash, C++, Linux, YOLO, OpenCV, Hadoop, Hive, Spark, DynamoDB

Tools: Pycharm, Tableau, Git, Docker, Airflow, Jira, Visual Studio, RStudio, Dbeaver, Hue, Confluence

Packages: PyTorch, NumPy, Pandas, Matplotlib, SciPy, Scikit-learn, Seaborn, PySpark, ggplot2

Cloud: Azure (Databricks, Data Factory, Data Lake, SQL DB), AWS (EC2, S3, Amazon Redshift, Lambda), GCP

WORK EXPERIENCE

Graduate Research Assistant, Columbus State University (Georgia, USA)	September 2022 – Dec 2023
<ul style="list-style-type: none">- Developed a cutting-edge surveillance system with real-time object classification and tracking capabilities.- Executed data collection for optical and infrared imagery, conducted data cleaning and performed label annotation. Trained a YOLOv8 computer vision model, achieving a mean Average Precision (mAP) score of 0.84.- Managed model deployment and improved GPU computing efficiency via CUDA optimization for low-power usage.- Built a Python API using JSON interface for seamless transmission of system responses.	

Application Development Associate, Accenture (Maharashtra, India)	November 2020 – June 2022
<ul style="list-style-type: none">- Created & implemented RPA-based web and database automation testing in an agile work environment.- Utilized DevOps methodologies, Automated data retrieval from Hadoop and AWS Athena within a Docker environment, seamlessly integrating data validation with Jenkins for efficient CI/CD pipelines.- Managed large datasets on cloud platforms, retrieved data via APIs, handled pharmaceutical inventory data, and used ETL Airflow tools for report generation on automated test results.- Independently developed script validation tool for non-tech team, saving over 100 hours of weekly manual effort.- Trained NLP model to understand the requirements and validate project fulfillment from compliance documents.	

PROJECT

Multi-Object Tracker Surveillance System (Georgia, USA)	Academic Project – December 2023
<ul style="list-style-type: none">- Engineered a DeepSORT-based multi-object tracking system, enhancing accuracy by 4% and precision by 6%.	
Self-Driving Raspberry Pi Car – Computer Vision and IoT (Georgia, USA)	Academic Project – December 2022
<ul style="list-style-type: none">- Employed advanced machine learning algorithms in a Linux environment using TPU to create an autonomous navigation system for a self-driving car prototype.	
RF Buddy – Script Scanning Tool (Maharashtra, India)	Accenture Innovation Project – March 2022
<ul style="list-style-type: none">- Built a script scanning desktop application using Tkinter to validate engineers are following the client requirement; distributed the executable version to the 120 engineers with continuous usage track into the database using pyodbc.	
Visualizing Citi Bike Trips with Tableau (Gujarat, India)	Coursera Certified Project – October 2020
<ul style="list-style-type: none">- Designed and disseminated insightful data visualizations utilizing Tableau dashboards.	
BirdStrike Prevention System – Computer Vision and IoT (Gujarat, India)	Academic Project – June 2019
<ul style="list-style-type: none">- Deployed Caffe and OpenCV for real-time bird detection, and interfaced with an Arduino to prevent bird hazards.	

CERTIFICATIONS

Machine Learning (Stanford University), **R-Programming** (John Hopkins University), **Deep Learning** Specialization (Stanford University), **Data Science** (HarvardX), **Big Data** with SQL (Cloudera), **AWS** Fundamentals (Coursera), **GCP**.