# Jemin Kachhadiya Software Engineer

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Github: <u>github.com/jeminkachhadiya</u>
Portfolio: <u>jeminkachhadiya.github.io</u>

### **SUMMARY**

A software engineer with 3+ years of professional experience with Python development and applying machine learning and data science principles to real-world problems to cater to business needs.

### **EDUCATION**

Columbus State University (Georgia, USA)

August 2022 - Dec 2023

Phone: 706-315-7519

Email: jemin.b.kachhadiya@gmail.com

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++, YOLO, OpenCV, PyTorch, NumPy, PySpark, Hadoop

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

Others: Advanced Excel, Databricks, Linux, Azure, AWS, GCP, Pandas, ggplot2, Tableau, Matlab

#### **WORK EXPERIENCE**

**Graduate Research Assistant, Columbus State University** (Georgia, USA)

September 2022 - Dec 2023

- 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 (Maharastra, India)** 

January 2021 - June 2022

- Created & implemented RPA-based web and database automation testing in an agile work environment.
- Utilized DevOps methodologies, I 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 a tool to streamline script validation, saving over 100 hours of manual effort weekly.
- Trained NLP model to understand the requirements and validate project fulfillment from compliance documents.

### **PROJECT**

Multi-Object Tacker Surveillance System (Georgia, USA)

Academic Project - December 2023

- 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

- 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 (Maharastra, India)

Accenture Innovation Project - March 2022

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

- Designed and disseminated insightful data visualizations utilizing Tableau dashboards.

**BirdStrike Prevention System** - Computer Vision and IoT (Gujarat, India)

Academic Project - June 2019

- 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), Analyzing Big Data with SQL (Cloudera), AWS Fundamentals (Coursera), Tableau (Coursera), GCP: Creating BigQuery Datasets and Visualizing Insights (Coursera).