Chetan Sethy
M.Tech Data Science (Applied Mathematics)
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I'm an **Engineer** who builds smart systems that solve business problems. I specialize in creating and launching automated solutions on cloud platforms like AWS. My expertise ensures AI tools are reliable, efficient, and tailored to business needs. I bridge the gap between **AI innovation** and **real-world applications**.

EDUCATION

- **M.Tech** in **Data Science** from **Defence Institute of Advanced Technology, Pune**   (2024-2026).
- **B.Tech** in **Computer Science Engineering** from **NIST University ,Berhampur ,Odisha** (2019-2023)
- **12th** from **Council of Higher Secondary Education,Odisha**   (2016-2018)

PROJECTS

Developed Own Cloud Computing with Al Intelligence by Custom Machine & Deep Learning Model that deploy using DevOps Technol-ogy Integrated with Generative Al – (ChatGPT API)

- **Designed and deployed an end-to-end AI platform** integrating custom Machine Learning and Deep Learning models within a scalable cloud infrastructure.
- **Engineered a fully automated DevOps CI/CD pipeline** (e.g., Jenkins, Docker, Kubernetes) for continuous building, testing, deployment, and monitoring of AI models and application components.
- **Leveraged Generative AI (ChatGPT API)** to enhance platform capabilities and user interaction features.
- **Developed and managed a custom cloud-native environment** to host the platform, optimizing for performance, resilience, and resource efficiency.

Taxi demand prediction in NewYork City

This project focuses on predicting taxi demand in New York City using time series analysis and machine learning techniques like XGBoost Regression. The goal is to analyze historical taxi ride data, identify patterns, and forecast future demand to optimize taxi availability, reduce passenger wait times, and improve operational efficiency.

Outcomes

- Improved demand forecasting for taxi operators.
- Reduced waiting time for passengers.
- Optimized fleet allocation, improving efficiency.
- Scalable deployment for real-time taxi demand prediction

Biometric Authentication System Using Dorsal Hand Vein Pattern

- This project involves a Biometric Authenticate system using Dorsal hand vein patterns, implemented with tools such as Python, OpenCV, and an Convolutional Neural Network (**CNN**).
- The system captures hand vein images, preprocesses them, extracts Binary Pattern features using CNN model. The system achieved a 90% recognition rate in training and 100% accuracy in testing.
- For demonstration , I have used Streamlit which create a web-based interface for demonstrating the system's functionality, such as uploading hand vein images, processing them, and displaying the results.

TECHNICAL SKILLS

- **Programming Languages**: Python, C, SQL
- **Applied mathematics**: Adv. Statistics, Linear Algebra, Optimization Technique
- **Data Analysis Tools**: MS Excel, Power BI
- **Machine Learning**: EDA, Model Tuning and Performance Analytics, Scikit-learn
- **Deep Learning**: Tensorflow, Pytorch, Keras
- **Data Manipulation & Visualization**: Pandas, NumPy, Matplotlib, Seaborn, Power BI
- **Database**: Mysql, MongoDB
- **AWS Cloud Services**: EC2, S3,IAM,SageMaker, Rekognition, Comprehend, Transcribe, Amazone Forecast, Personalize, Lex, Fraud Detector, Translate, Poll
- **Version Control**: Git, Github
- **DevOps tools**: Jenkins, Docker, Podman, Kubernetes, Openshit, Terraform,
- **OS**: RHELv9

SOFT SKILLS

- **Problem-Solving**: Skilled at finding solutions to business challenges using data.
- **Communication**: Able to explain complex data in a simple way.
- **Team Collaboration**: Works well with others to reach common goals.

TRAINING & CERTIFICATIONS

- Linux World Summer Internship 2025 by **Vimal Daga**   (Completed Date , July 31 2025)
- DevOps Certification From **NareshIT** HYD   (Completed Date , July 10 2024)

ACHIEVEMENT

- Winner in Science Quiz at State level (2016)
- GATE 2024 Qualified

HOBBIES

- Geopolitical analysis
- Passionate about exploring new field
- Dedicated GYM Practitioner
- Nature Explorer

LANGUAGE

- English
- Hindi
- Odia