# Niveditha S

#### Chennai, India | Website/Niveditha Email/Niveditha | linkedin/Niveditha | github/Niveditha

### **EDUCATION**

# INDIAN INSTITUTE OF TECHNOLOGY, GUWAHATI (IIT-G)

MICRO-DEGREE PROGRAM, COMPUTER SCIENCE June 2024 – Sep. 2025 | Guwahati, AS, India Continuing Education with 24 credits under UGC

### RAJALAKSHMI ENGINEERING COLLEGE

B.Tech Biotechnology Aug. 2021 – May 2025 | Chennai, TN, India Cum. GPA: 8.34 / 10.0

# CERTIFICATION

AWS Certified Cloud Practitioner Google Data Analytics Professional Certificate IBM Certificate - NoSQL, Big Data and Spark IBM Certificate - Data Science Professional IBM Certificate - Data Engineering Fundamentals

#### IPR

#### **PATENT**

Al based Nano robotic arm (UK 6291782)

Tableau Desktop Specialist

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Cerebrovascular Accident Prognosis algorithm (SW-16203/2023) Enhanced tool for video organizer (SW-16851/2023)

## **SKILLS**

#### **PROGRAMMING**

Core Technical Skills:
Python • SQL • R • Data Structures •
Algorithms • Databases • ETL • API
Analytics & Cloud:
Statistics • Machine Learning • Data
Analysis • Reporting • Visualization •
AWS • GCP • Git • CI/CD

#### **EXPERIENCE**

#### AIQUANTALYTICS - VIHAANAI CYBERLABS PVT. LTD.

RESEARCH & DATA SCIENCE ASSOCIATE | MENTORED RESEARCH PROGRAM May 2023 – Jan. 2025 | Bangalore, KA, India

- Optimized models in cybersecurity, natural language processing, speech recognition, and medical imaging, contributing to innovative projects like malware detection, and brain tumor segmentation.
- Co-authored peer-reviewed papers in Elsevier and Springer outlets, submitted manuscripts to IEEE/Springer-level venues, and secured a UK Design Patent for an Al-based Nano Robotic Arm for endoscopic operations.
- Built complete data pipelines (collection to preprocessing to feature engineering to deployment) using Python, Pandas, NumPy, and scikit-learn, implemented automated feature selection for large datasets, and collaborated with cross-functional researchers to deliver AI solutions.

#### **PROJECT**

# **PAYMENTS ETL PIPELINE ON AWS** | AWS S3, GLUE, REDSHIFT SERVERLESS, IAM, PYTHON, SQL

Designed and deployed an ETL pipeline for synthetic e-commerce payments, automating ingestion  $\rightarrow$  cleaning  $\rightarrow$  storage of 1M+ records. Achieved fast SQL querying in Redshift and reduced reporting prep time from

# YOUTUBE ADS ANALYTICS DASHBOARD | GOOGLE BIGQUERY, PYTHON (PANDAS, MATPLOTLIB), LOOKER STUDIO, SQL

hours to minutes by centralizing data in the warehouse.

Collected and analyzed YouTube Ads campaign data (CTR, CPC, ROI) and modeled ad performance using Python + SQL on BigQuery.
Built an interactive Looker Studio dashboard that helped identify low-performing campaigns, improving ROI tracking accuracy by 18%.

# **CLOUD AI CUSTOMER SUPPORT ASSISTANT** | GCP VERTEX AI, CLOUD RUN, BIGQUERY, LANGCHAIN, PYTHON

Developed a retrieval-augmented (RAG) chatbot that answered customer FAQs by combining company knowledge base with LLMs on Vertex AI. Deployed on Cloud Run with BigQuery backend, reducing support query resolution time and handling 100+ queries in real-time demo tests.

## **AWARDS**

2023 Top 10 Performer
 2023 Top 20 teams
 2024 First
 Databricks Spark-Wars Hackathon
 Shell.ai Hackathon
 DISS FEST - Oral Presentation

### PUBLICATIONS

- 1. https://ieeexplore.ieee.org/abstract/document/10235122
- 2. https://link.springer.com/chapter/10.1007/978-981-97-3556-3 29
- 3. https://ijsrset.com/home/issue/view/article.php?id=IJSRSET23103151