

ATUL KUMAR RAI

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[LinkedIn Profile](#) || [Portfolio](#)

SUMMARY

Experienced AI Analyst at Accenture, specializing in developing AI solutions, training models, and building agentic AI systems for real-world use cases. Skilled in designing, deploying, and optimizing data-driven solutions to solve complex business challenges.

TECHNICAL EXPERTISE

- **Programming:** Python || SQL
- **AI/ML Frameworks:** PyTorch || TensorFlow || Scikit-learn || Transformers || OpenAI API
- **NLP & CV:** GPT Vision || Claude Sonnet 3.5 || O1 Mini || OCR (AWS Textract, Pytesseract) || YOLO || CNN Architectures
- **Cloud & Deployment:** AWS || Docker
- **Data Engineering:** ETL Pipelines || Data Cleaning || Data Transformation
- **Automation & Integration:** Agentic AI || LangChain
- **Development Practices:** Prompt Engineering || CI/CD
- **Certifications :** AWS Developers Associate ([Link](#))

PROFESSIONAL EXPERIENCE

AI/ML Computational Science Analyst ,Accenture

Aug 2023 - Present

Investor Relations AI Tool

- Developed an AI-driven **Investor Relations Tool** designed to streamline financial data analysis, enhancing decision-making for investors and analysts.
- Integrated **sentiment analysis capabilities** to evaluate call transcripts, analyst reports, and market trends, providing actionable insights.
- Built a Research Assistant Module powered by **Agentic AI**, enabling intelligent **RAG based** query understanding and efficient redirection to relevant data within large financial documents.
- Automated the end-to-end analysis process, improving efficiency by **50%** and reducing manual effort by **80%**.

Document Quality Review Bot

- Designed and deployed an automated system that verifies over **500** documents per day (~**3,500–4,000 weekly**) with **90–92%** accuracy.
- Implemented **35+** checks using custom python logic and custom-built models for **orientation check, legibility check, signature detection, quality check, entity detection check** and **invalid picture check** based on business logic.
- Utilized **YOLO, CNN** architectures, and OCR engines like **AWS Textract** and **Pytesseract** to ensure comprehensive document validation.
- Delivered significant time and cost savings by automating manual review processes, enhancing overall data quality and user experience.

Medical On-Air Call (MOC) Assistant

- Designed a **RAG based** Medical Care Assistant for product teams to address real-time queries related to product compliance, documentation, and scaling strategies.
- Automated FAQs and support processes, improving response time and reducing manual intervention.
- Utilized **GPT-4** Vision for advanced comparison tasks such as complex image analysis and comparison.
- Integrated **AWS Glue Jobs** for efficient ETL workflows and optimized storage using Amazon S3 with **EFS syncing**, enabling dynamic updates without frequent deployments.
- Reduced manual processing time from **2–3 weeks to 5–10 minutes**, significantly enhancing productivity and accelerating decision-making.

EDUCATION

Vellore Institute of Technology (VIT Vellore)	2019-2023
B.Tech Information Technology	7.93
Sunbeam English School Bhagwanpur, Varanasi	2017-2018
Class XII (ISC)	83 %
Sunbeam English School Bhagwanpur, Varanasi	2015-2016
Class X	8.8