

# Abinash Sahu

## Masters of Data Science - Machine Learning Specialist

As a Master of Data Science graduate with extensive experience, I apply my expertise in machine learning and cloud technologies to develop and optimize AI-driven solutions. I leverage advanced techniques and large language models to enhance product functionality, streamline processes, and drive impactful outcomes. I aim to contribute skills in automated testing, MLOps, and cloud platforms to deliver innovative applications.



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lleraserheadll.github.io/

## SKILLS

Large Language Models	Pytorch, TensorFlow	HuggingFace, RAGchain	PostGresql, NoSQL
Kubernetes, Docker	Azure ML Studio	Google Cloud Vertex AI	Jenkins, GIT/BitBucket
Tensorboard, A/B testing	Hadoop,Spark,Kafka	Tableau, PowerBI	Slack, JIRA, Notion

## EDUCATION

### Masters of Data Science-Machine Learning Specialisation

The University of Sydney

02/2023 - 07/2024

WAM - 80.7

#### Courses

- High Distinction in Data Science LLM Capstone Project, Computational Statistical Methods & Data Science
- Distinction in Advanced Machine Learning, Deep Learning & Data Engineering

### Bachelors of Technology in Electronics and TeleCommunication

KIIT University

04/2014 - 04/2018

GPA - 8.48

#### Courses

- Achieved Excellent Grades in Thesis Project, Artificial Intelligence & Internet of Things
- Achieved Excellent Grades in Signals & Systems, Robotics & Embedded Circuits

## WORK EXPERIENCE

### Artificial Intelligence Engineer

Flomoney Private Limited (AI Driven Startup)

10/2020 - Present

Singapore

#### Achievements/Tasks

- Leveraged RAG and LLMs to enhance data retrieval and response accuracy, greatly improving query resolution. Implemented MLOps using Kubernetes, Docker, and MLflow with TensorFlow, PyTorch, and Hugging Face to optimize production models.
- Created a multimodal classifier for image and text data, utilizing OCR and NLP concepts to enhance image label predictions, achieving 94.5% accuracy in a multi-label classification task.
- Developed and launched an AI-driven chatbot for the legal sector on Azure Cloud. Leveraged advanced LLM concepts and fine-tuned GPT-3.5 models to enhance legal tech solutions, improving efficiency by 20% and accuracy by 25% in legal research.
- Developed automated test suites for AI models using Python, integrated with CI/CD pipelines, and utilized Kafka for simulating real-time data streams and integration testing.
- Managed the migration of a legal AI platform from Azure Cloud to Google Vertex, ensuring a seamless transition and resolving migration bugs along the way.

### University Tutor for COMP5318: Machine Learning & COMP5339: Data Engineering

The University of Sydney

06/2023 - 05/2024

Sydney, Australia

#### Achievements/Tasks

- Assisted students part-time after hours with studying specific units, providing personalized guidance to enhance their understanding of machine learning and data engineering concepts.

## WORK EXPERIENCE

### Application Development Analyst Accenture

04/2018 - 06/2020

#### Achievements/Tasks

- Extended technical proficiency to SAP-ABAP, working extensively on database management using SQL and PostgreSQL.
- Played a key role in the Data Science team, managing and analyzing data to create pipelines and derive business insights.
- Developed 12 novel visualizations for time-series and high-dimensional data, enhancing user comprehension and interaction. Presented these visualizations to stakeholders, facilitating data-driven decision-making.
- Received acknowledgment from my client and was nominated for the Accenture Ace award. Recognized for leadership in managing end-to-end projects and effectively communicating with stakeholders.

## PROJECTS

### Market Notes: Streamlined Financial Briefings for ASX (Capstone Project for Master Thesis)

- Partnered with stakeholders to deploy a service using Pegasus LLM (Hugging Face) to summarize Stock Exchange updates into newsletters. Hosted on AWS with Python, React, and JavaScript, achieving 95% user satisfaction. Utilized Spark for efficient data processing.

### DocuMentor: Dynamic Document-Driven Tutoring Platform (Personal Project)

- Developed a 24/7 AI-driven tutoring platform using Python, PyTorch, Hugging Face Transformers, and LLM fine-tuning of OpenAI for personalized academic support. Utilized TensorBoard for performance profiling and optimization on GPUs.

### Emovisor: Facial Emotion Analysis Initiative (Personal Project)

- Developed an emotion recognition system achieving 78% accuracy using computer vision and machine learning techniques. Implemented using OpenCV for facial recognition, TensorFlow for model training, and Python for data analysis

### FuelFlow: Real-time Fuel Price Analytics Dashboard for NSW (Personal Project)

- Designed and deployed an interactive dashboard displaying real-time fuel price trends and fluctuations in Australia. Utilized data pipelines and Apache spark for data processing, Streamlit for the dashboard, and hosted the website on an AWS EC2 instance.

### SanView: Bike Sharing Analytics Dashboard (Personal Project)

- Crafted a comprehensive analytics dashboard using Tableau to visualize the usage statistics of London's Santander Bike Sharing Scheme. Displayed key metrics such as peak usage times, popular routes, user demographics, and bike availability across various docking stations.

### Personal Portfolio Website(Personal Project)

- Crafted and launched my personal portfolio website from the ground up using JavaScript, HTML, and SCSS – a true side project labor of love!

## COMPETITIONS & SOCIALS

### Macquarie Hackathon Macquarie Bank

#### Tasks/Achievements

- Made it to the top 8 performers in the hackathon.

### Pont3 Volunteer Sydney Marathon

#### Tasks/Achievements

- Managed street closures and distributed water to marathon contestants.

### McKinsey X BAP Consulting Competition McKinsey & Usyd

#### Tasks/Achievements

- Represented Usyd as one of the six teams in the competition.

### Club Subcommittee Admin Usyd Badminton Club

#### Tasks/Achievements

- Hosted various inter-university competitions seamlessly and managed daily activities.

## ACHIEVEMENTS

### Recipient of the International Student Scholarship

*Awarded for academic excellence and community involvement during Master's Studies.*

### Stanford & Oracle certified Machine Learning and SQL

*Secured a 96.57% (Award of Achievement) from the certification.*