

# Shaheer Khan

## Data Engineer

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### Profile Summary

- Final-year **Data Engineering** student with strong skills in **programming and big data technologies**. Proficient in **Python, R, and SQL**, with hands-on experience in **data analysis, infrastructure engineering, and machine learning**. Well-versed in **object-oriented programming (OOP)** and **data structures & algorithms**.
- Skilled in **databases (MySQL and MongoDB)**, **networking (Cisco)**, **virtualization (NDG)**, and **cloud computing (Azure)**, with a keen interest in **AI, emerging technologies, and scalable data solutions**. Passionate about **optimizing data workflows** and **leveraging automation** for efficient data processing.
- A **quick learner and problem solver**, eager to apply technical knowledge to **real-world projects**. Enthusiastic about working in **diverse, multicultural teams** to drive innovation in data engineering. A **proactive team player**, always ready to collaborate and contribute.
- Fluent in English and excel in multicultural, diverse work environments.

#### Education

**Technical and Further Education (TAFE)**   
**Bachelors of IT (Data Engineering)**  
Sydney, Australia, 2023-2025 **GPA: 3.25/4.00**

#### Technical skills

**Languages:** Python, JavaScript, R.

**Networking:** Cisco.

**Databases:** **SQL:** MySQL, **NoSQL:** MongoDB

**Cloud:** Microsoft Azure.

### Projects & Academic Experience

#### Fake Currency Detection System – Computer Vision & Machine Learning

University Coursework | [Feb/2025]

- Developed an **AI-powered fake currency detection system** using **deep learning and computer vision**, integrating **TensorFlow, OpenCV, and Raspberry Pi** to classify real and counterfeit banknotes in real time.
- Built a **custom dataset** of real and fake currency images, applying **data augmentation** to improve model generalization. Designed and trained a **Convolutional Neural Network (CNN)** to extract security features like **holograms, watermarks, and microtext**, optimizing it with **TensorFlow Lite** for **fast inference on low-power hardware**.
- Implemented **automated image capture** using **Raspberry Pi Camera Module**, integrating a **real-time classification pipeline** with an intuitive user interface.

#### Flight Management System – Data Structure and Algorithms

University Coursework | [Aug/2024]

- Developed a fully functional Flight Management System** in Python, integrating object-oriented programming (OOP), data structures, and algorithms.
- Designed a **class-based architecture** to manage flights, passengers, and bookings, optimizing search and retrieval using a **Binary Tree**. Implemented **BubbleSort, MergeSort, and Binary Search** to enhance performance. Built a structured **user interface with menus** and integrated **file handling** for data storage. Added helper functions to improve efficiency, ensuring smooth execution and usability.
- Successfully executed and tested** the project, demonstrating strong problem-solving, algorithmic thinking, and software development skills.

#### Ai Powered Resume Screening Tool – Natural Language Processing

University Coursework | [Dec/2024]

- Built an **NLP-based resume screening tool** to automate candidate shortlisting.
- Preprocessed text using **tokenization, stopword removal, lemmatization, and word embeddings** (TF-IDF, Word2Vec).
- Trained models (**Logistic Regression, Random Forest, BERT**) to rank resumes based on job descriptions. Achieved **high accuracy** in matching candidates while optimizing **precision, recall, and F1-score**.
- Deployed the model on a local machine for **cost-effective, on-premises processing**, ensuring data privacy. Documented challenges, improvements, and future recommendations in a detailed report.