

Danish Khalled

Big Data & Database Engineer

Singapore | +65 8666 1591 | mdanishboy@gmail.com | LinkedIn: danish-khalled | Website: danish-khalled.com

PROFESSIONAL SUMMARY

Computer Science graduate specializing in **Big Data** with strong expertise in **Database Management** and **Data Automation**. Proficient in designing scalable schemas using **PostgreSQL** and **Firebase** (NoSQL). Experienced in building automated data pipelines with **Python** and **VBA**, and leveraging **Dialogflow** for NLP data processing. Passionate about transforming raw data into actionable insights through efficient modeling and engineering.

TECHNICAL SKILLS

- **Data Engineering:** Python (Pandas), ETL Pipelines, MapReduce, Data Mining, Excel VBA (Macros)
- **Database Management:** PostgreSQL, MySQL, Firebase Firestore (NoSQL), Prisma ORM, Schema Design
- **Cloud & DevOps:** Google Cloud Platform (Dialogflow), Docker, GitHub Actions (CI/CD)
- **Languages:** SQL, Python, JavaScript, TypeScript, C#, Java, HTML/CSS
- **Methodologies:** Domain-Driven Design (DDD), Test-Driven Development (TDD), Agile/Scrum

EDUCATION

University of Wollongong <i>Bachelor of Computer Science (Big Data)</i> <i>Relevant Coursework: Big Data Management, Database Systems, Data Mining, Software Engineering</i>	Singapore Jan 2024 – Jun 2025
Nanyang Polytechnic <i>Diploma in Game Development & Technology</i>	Singapore 2018 – 2021

KEY DATA PROJECTS

The Neural Network (Database Architecture) Video Link Github Repo Link	2025
• Designed and implemented a normalized PostgreSQL relational database schema to support a C2C platform.	
• Utilized Prisma ORM to enforce strict type safety and data integrity across complex entity relationships.	
• Architected the Data Persistence Layer using Domain-Driven Design (DDD) to ensure scalable data access.	
• Developed automated testing pipelines for database transactions to prevent data anomalies.	
ChatTots (AI & NoSQL Data Modeling) Video Link Github Repo Link	2025
• Modeled a scalable NoSQL database (Firestore) to store unstructured user interactions and content metadata.	
• Integrated Dialogflow (NLP) to analyze natural language inputs, converting text into structured query data.	
• Built an Analytics Dashboard to visualize user engagement metrics and content performance.	
osu! Thumbnail Generator (Data Extraction Pipeline) Github Repo Link	Personal
• Developed a Python-based ETL tool that extracts raw gameplay data via the osu! API v2 .	
• Automated the processing of JSON payloads (player stats, beatmap metadata) to dynamically render visual assets.	
• Eliminated manual data entry by creating a script that parses, cleans, and formats API responses.	
CNB Anti-Drug VR Game <i>Game Programmer (FYP)</i> Video Link Github Repo Link	2020
• Developed an immersive Virtual Reality game using Unity and Google Cardboard for CNB.	
• Implemented core VR mechanics including gaze-based interaction and head tracking.	
• Optimized game performance for mobile devices via occlusion culling and baked lighting.	

EXPERIENCE

Singapore Armed Forces (SAF) <i>Admin Support Assistant</i>	Singapore Oct 2021 – Oct 2023
• Engineered Excel VBA macros to automate the extraction and transformation of personnel data, reducing manual processing time by 40%.	
• Designed automated reporting tools to filter and format large datasets for unit readiness analysis.	
• Maintained data accuracy across unit records by implementing validation scripts within Excel forms.	
Nanyang Technological University <i>Game Development Student Intern</i>	Singapore Mar 2020 – May 2020
• Programmed data interaction logic using C# and Unity , processing real-time sensor data from Kinect SDK.	
• Collaborated on optimizing code performance for real-time tracking systems.	

AWARDS

- **Best Soldier of the Month** (SAF PERS HUB) May 2023
- **EAGLES Award** (Leadership & Service) 2016 & 2017