# **RUBEN HANNES GADD**

### **Contact Details**

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#### **PROFILE**

BSc Information Knowledge and Systems student with an elective stream in Data Science at the University of Pretoria. Six years of programming experience, with Java as the strongest language amongst other languages. Strong teamwork and communication skills developed through large-scale group projects.

Proficient in both Full-Stack Development and Data Science, with hands-on experience designing, modelling, and implementing software systems, as well as cleaning, analysing, and visualising data for Machine Learning models.

#### **EDUCATION**

BSc Information Knowledge and Systems (Data Science Stream), Expected Graduation: 2025 Marks:

## 1st Year:

Academic Information Management 111 (88%)

Academic Information Management 121 (84%)

Academic Literacy for Information Technology (77%)

Program Design: Introduction (62%)

Operating Systems (63%)

Imperative Programming (67%)

Introduction to Computer Science (67%)

Statistics 122 (85%)

Statistics 110 (82%)

Discrete Structures (69%)

Mathematics (65%)

Linear Algebra (68%)

Calculus (70%)

Mathematical Modelling (87%)

Weighted Average (Term): 71.67% Cumulative Weighted Average: 71.67%

# 2nd Year:

Theoretical Computer Science (81%)

Data Structures and Algorithms (64%)

Software Modelling (65%)

Netcentric Computer Systems (62%)

Introduction to Database Systems (79%)

Concurrent Systems (76%)

Computer Organisation and Architecture (76%)

Community-Based Project (87%)

Statistics 210 (75%)

Statistics 220 (75%)

Applications in Data Science (88%)

Discrete Structures (72%)

Weighted Average (Term): 73.96% Cumulative Weighted Average: 72.93%

• 🏫 Leeuwenhof Akademie — National Senior Certificate (5 Distinctions)

## **TECHNICAL SKILLS**

**Programming Languages:** Java, Python, C++, JavaScript, PHP, GoLang, R, SQL, NoSQL, SAS, HTML, CSS

Frameworks & Libraries: React, Node.js, YOLO, Express

Databases: PostgreSQL, MongoDB, Microsoft Access, ObjectDB, BaseX (XML)

**Data Science & Analytics:** Data Tidying and Cleaning (dplyr, tidyr), Data Visualisation (ggplot2), Logistic Regression, Random Forest, Decision Tree, KNN, Naïve Bayes, K-Means, Hierarchical Clustering, PCA

Tools & Environments: RStudio, Jupyter, Git/GitHub, VS Code, Excel, PowerPoint, Word

#### **PROJECTS**

#### African Wildlife Detection System (Software Engineering Capstone Project)

- Designed and implemented a real-time object detection system using the YOLO framework integrated into a React frontend.
- Led data gathering, cleaning, and preparation for wildlife image datasets used in training and inference.
- Developed functionalities used in par with the Client- and Server-Side Inference Models in attempt to enhance user experience
- Collaborated in an agile, Git-based development environment focused on modular design and performance optimization.

# **OTHER EXPERIENCE**

SANReN CSC 2025 Challenge Participant

# **INTERESTS**

 $Wildlife\ Technology \cdot Ranger\ Training$