

Ramara Dennis Mmachoene

dennism.ramara@gmail.com | 0609468143 | LinkedIn: dennis-mmachoene-ramara | GitHub: dennis-mmachoene

EDUCATION

Tshwane University of Technology
Diploma in Computer Science

Emalahleni, South Africa
Expected Graduation: May 2025)

- **Concentration:** Software Programming, Mobile Device Programming, Database Design, System Analysis
- **Relevant Coursework:** Computing in Java, Object-Oriented Programming, Internet Programming Using Java EE, Discrete Mathematics, Operating Systems, Information Security

Ipopeng High School,
Matric Certificate

Limpopo, South Africa
2021

- **Subjects:** Sepedi Home Language, English First Additional Language, Mathematics, Life Sciences, Agricultural Science, Geography, Life Orientation

EXPERIENCE

Student Cluster Competition Participant

eMalahleni Warriors, Centre for High Performance Computing (CHPC)

July 2023

- **Designed and built** a prototype compute cluster using virtual machines, gaining hands-on experience with Linux, cloud computing, and systems administration.
- **Implemented and configured** high-performance computing (HPC) tools such as Zabbix for monitoring and Slurm for workload scheduling, enhancing cluster performance and efficiency.
- **Collaborated in a team** to develop a cost-effective HPC cluster design, presenting technical specifications and optimization strategies to a judging panel.

1st Annual Mpumalanga Artificial Intelligence Student Hackathon (MAISH) Participant and Designer

Young Innovators Team, Tshwane University of Technology

October 2023

- **Designed the user interface** for "SmartSorter," an application aimed at improving waste management through AI image recognition and categorization.
- **Collaborated with a team** to develop a prototype that addresses environmental pollution by helping municipalities and recycling facilities efficiently sort and manage waste.

2nd Annual Mpumalanga Artificial Intelligence Student Hackathon (MAISH) Team Lead, Scrum Master, and Mentor

Smart Crops Solutions Team, University of Mpumalanga

October 2024

- **Led a team** to develop "Smart Crops Solution," an AI-driven platform for predicting agricultural market prices, enhancing farmers' decision-making and profitability.
- **Managed project workflow** using Scrum methodologies, ensuring efficient team collaboration and timely completion of tasks.
- **Secured second place** in the competition by presenting a comprehensive solution that integrated real-time data analysis, user-friendly interfaces, and AI algorithms for market prediction.

Backend Developer Intern and Team Leader
Informatics Community Engagement Projects (ICEP)

July 2024 – Present

- **Leading the backend team** in developing APIs using Node.js and JavaScript, and managed database design with MySQL for the **Extreme Service Delivery Portal (ExSD)**.
- **Integrated APIs** with a React application, ensuring seamless communication between the frontend and backend systems.
- **Explored deployment options** on AWS to enhance the scalability and reliability of the project, demonstrating a proactive approach to learning and implementation.

PROJECTS

Food Donation System
Tshwane University of Technology

Final Year Project, 2024

- **Developed a web application** using Java EE framework (Web apps/EJB Modules) and Derby database, tested on GlassFish server, to facilitate the donation and distribution of surplus food.
- **Collaborated with a team** to design and implement features for donors, volunteers, and beneficiaries, ensuring a seamless and user-friendly experience.
- **Managed source code** on GitHub, demonstrating proficiency in version control and collaborative development.

SKILLS

Programming Languages: Java (including Data Structures), JavaScript, HTML, SQL, Node.js
Platforms: Linux, Windows
Languages: English, Sepedi

- Ability to work independently and as part of a team
 - Good communication skills
 - Strong analytical and problem-solving abilities
-