MATOME MBOWENE

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PROFESSIONAL SUMMARY

Final-year BSc Computer Science & Computer Engineering student at the University of Cape Town with a strong technical foundation in Python scripting, machine learning, and full-stack development. Passionate about supporting solution architecture with hands-on technical skills and a proven ability to collaborate with cross-functional teams. As a Dell Young Leader, I bring excellent communication skills, a growth mindset, and enthusiasm for learning HPEs cutting-edge technologies to contribute as a Presales Intern and grow into a future-ready Solution Architect.

EDUCATION

BSc Computer Science & Computer Engineering   Feb '20 - Jul '25

University of Cape Town | Cape Town

- Relevant Coursework: Software Engineering, Systems Analysis, Algorithms, Data Structures

EXPERIENCE

AI Researcher   May '25 - Present

University of Cape Town

- Executed **Q-learning algorithms utilizing Python scripting** to reach an optimal reward of 0.96 within 5 steps for reinforcement learning models
- Pioneered **visualizations for AI project solution** planning and performance monitoring with pytorch technology
- Collaborated with peers to **refine models**, showcasing teamwork and problem-solving skills relevant to presales support

Systems Programmer   Apr '25 - Apr '25

University of Cape Town

- Simulated **CPU scheduling algorithms (FCFS, SJF, Round Robin) in Java**, analyzing metrics to recommend efficiency improvements
- Documented findings and **tuned parameters**, supporting technical documentation and solution optimization tasks

Machine Learning Developer   Mar '25 - Mar '25

University of Cape Town

- Developed a **Python-based feedforward neural network in PyTorch, achieving 89.33%** accuracy on FashionMNIST classification (top 15% of class)
- Supported technical configurations by building **modular training pipelines**, demonstrating scripting proficiency for automation tasks
- Presented results to academic audiences, refining **ability to communicate technical concepts clearly** a key presales skill

Software Engineer   Jul '24 - Sep '24

University of Cape Town

- Led a 3-person team to deliver MyAdvisor, a **Spring Boot web application**, using Agile methodologies to meet deadlines and client needs
- Designed **RESTful APIs and integrated MySQL**, providing hands-on support for technical solution design
- Facilitated **cross-functional collaboration**, aligning technical deliverables with stakeholder requirements

ACHIEVEMENTS

- Dell Young Leaders Scholarship: Awarded for **academic** and leadership excellence (2020-Present)
- AI Model Performance: Achieved **89.33% accuracy in neural network** classification tasks
- Technical Projects: Completed **8+ projects** across AI, web development, and systems programming

- Attained **6 dinstinctions** in Matric for Physics, Maths, Life sciences, Agricultural sciences, Life orientation, Sepedi

LEADERSHIP & PROFESSIONAL DEVELOPMENT

Dell Young Leaders Program | 2020 - Present
- Selected for **academic excellence** and leadership potential, gaining skills in communication, collaboration, and professional growth
- Participated in workshops emphasizing teamwork and strategic planning, preparing me for **HPEs** collaborative environment

Technical Leadership
- Led **development teams**, fostering collaboration and delivering projects on time
- Presented **technical solutions** to diverse audiences, enhancing ability to support customer meetings

REFERENCES

Available on request.

TECHNICAL SKILLS

- Scripting & Programming: **Python** (Advanced), PowerShell (Familiar), C++, Java, SQL
- AI/ML & Data Analysis: **PyTorch**, Neural Networks, Reinforcement Learning, Data Visualization
- Development & Tools: **RESTful APIs**, Spring Boot, MySQL, Git, Agile Methodologies
- Technologies: Basic knowledge of **cloud solutions**, compute, and automation