Thomas Shikalepo Deon

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LinkedIn: linkedin.com/in/thomas-shikalepo | **GitHub:** github.com/ThomasShikalepo | **Portfolio
Website:** nextjs-creative-website.vercel.app

OBJECTIVES

As a motivated student pursuing a Bachelor's degree in Computer Science at the Namibia University of Science and Technology, I am actively seeking a software engineering internship opportunity. I have developed a strong foundation in various programming languages, including Python and Java, and possess practical experience in web development technologies such as HTML, CSS, and JavaScript.

My academic and technical competencies have equipped me with the skills necessary to contribute effectively to real-world projects. I am dedicated to continuous learning, fostering innovation, and collaborating with peers to develop impactful software solutions. I aim to leverage this internship opportunity to gain valuable practical industry experience while contributing positively to the projects undertaken by the organisation.

SKILLS

Skill Category	Skills	Proficiency Level
• Front-End	o HTML	o Intermediate
	o CSS	o Intermediate
	o JavaScript	o basic
• Back-End	o Ballerina	o intermediate
	o PHP	o basic
	o java	o Intermediate
	o Python	o Intermediate
• Database	o SQL	o Intermediate

EDUCATION

Namibia University of Science and Technology:

- *Computer Science, Software Engineering*

A Shipena Secondary School:

- 41 points in grade 12

- 37 points in grade 11

Certifications:

- CCNA1 (Cisco Certified Network Associate): *Basic switching and routing **(2024)***
- CCNA2 (In Progress): *Switching, Routing, and Wireless Essentials*

PROJECTS

Immersive 3D Portfolio Experience

- Conceptualised and built a cutting-edge portfolio website using Next.js, Three.js, and Tailwind CSS, combining innovative technology with artistic design.

- Designed visually compelling animations, including a rotating icon as the main focal point, a disappearing staff in the project section for mobile users, and a spinning hat in the "About Me" section, showcasing advanced use of Three.js for 3D modelling.

- Incorporated audio features to enhance interactivity, demonstrating attention to user engagement and experience.

- Utilised GitHub APIs to dynamically display real-time coding activity and performance statistics, reflecting strong integration and API handling skills.

- Optimised the website for responsiveness and accessibility across multiple devices and platforms, ensuring a flawless user experience.

Football Match Analysis Using AI and Computer Vision

- Developed a video analysis system to detect and track players, referees, and footballs using YOLO for real-time object detection.

- Enhanced detection accuracy by training the YOLO model with custom datasets.

- Segmented and clustered players into teams using K-means, enabling the model to differentiate between teams and analyse ball possession percentages.

- Implemented player and referee tracking, distinguishing roles and teams during match analysis.

- Applied optical flow and perspective transformation to measure movements and convert pixel data into real-world metrics like speed and distance covered.

- Tackled real-world challenges, integrating computer vision, clustering, and object tracking for advanced sports analytics.

Micrograd Implementation and Development

- Built a lightweight autodiff engine inspired by Micrograd to simulate neural network operations.

- Implemented forward and backward propagation for gradient-based learning in a custom computational graph.

- Ooptimised machine learning workflows using Python and libraries such as NumPy, matplotlib, and Graphviz for visualisation and computation.
- Demonstrated expertise in implementing neural network foundations, including gradient descent and optimisation techniques.

Kafka logistic system

- Designed an Apache Kafka logistic system using Ballerina as the backend.
- Implemented features for standard, express, and international shipping options.
- Utilised Kafka as middleware to handle logistics, efficiently managing data through various topics.

Personal Website

- Developed a personal website using HTML, CSS, and JavaScript to showcase my skills and projects.
- Designed a user-friendly interface to enhance user experience and accessibility.
- Implemented responsive design techniques to ensure compatibility across various devices and screen sizes.