

PERSONAL

Name
Tian Pretorius

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5 Winstead Road, Leonard
3245 Hilton

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Email
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Date of birth
14-12-1993

Gender
Male

Nationality
South Africa

Marital status
Single

LinkedIn
<https://www.linkedin.com/in/tian-pretorius-817a2189/>

INTERESTS

- Information Security and Hackathons
- Robotics and Electronics Projects
- Science and Technology
- Health and Fitness Science
- Sport

LANGUAGES

English ★★★★★
Afrikaans ★★★★★

TIAN PRETORIUS

Computer Engineer with 6+ years of proven experience in software development, automation systems, and technical leadership. Demonstrated expertise in Python programming, system optimisation, and cross-functional collaboration through developing innovative solutions, including computer vision algorithms and automated compliance systems. Strong background in implementing security measures and delivering scalable technical solutions. Seeking to leverage my problem-solving abilities, engineering foundation, and passion for clean, maintainable code to drive product development and technical excellence while contributing to architectural decisions in a collaborative environment.



WORK EXPERIENCE

- Mar 2025 - Sept 2025

Chief Technical Officer
Vandenburg (Pty) Ltd, Hilton, South Africa
 - Designing and producing vitamin and mineral premixes for both human and animal nutrition.
 - Overseeing the setup and optimisation of blending and production lines, such as mixers and blenders for vitamin blends and sugar fortification.
 - Improving fortification processes to ensure they meet national standards and industry best practices.
 - Working on sustainable and scalable factory solutions, including potential partnerships with various companies for machinery and systems.
 - Consulting and innovating in large-scale food fortification projects, especially in developing countries.
 - Managing or contributing to trading operations, such as sourcing and supplying fortificants, supplements, and related nutrition commodities.
- Jun 2020 - Mar 2025

Computer Engineer/Solutions Engineer
Millhouse International (PTY) Ltd, Hilton
 - Worked as a solutions engineer focusing on automation and compliance systems for the micronutrient industry.
 - My key contributions included creating automated systems for designing custom micronutrient blends that comply with international fortification regulations, developing quality assurance systems for product development, implementing company-wide digital security measures, and creating product procedure systems to meet regulatory standards like FSSC 22000.
 - I also provided comprehensive technical support, conducted R&D activities, assisted with procurement processes, and developed/tested new product compositions.
- Nov 2019 - Mar 2025

Lead Engineer
InnovateX (PTY) Ltd, Hilton
 - Simultaneously with my role at Millhouse, I led the development of Detect(x), an innovative vitamin testing and tracking platform.
 - My primary achievement was developing a sophisticated particle recognition algorithm using OpenCV, Python, and Java for Android development to detect vitamin A content in sugar crystal samples.
 - I wrote and maintained custom software to optimise system performance, participated in the complete software development lifecycle from requirements analysis to implementation, and developed solutions to address internal system issues while improving overall efficiency and efficacy.

Jan 2017 - Jun 2019

Post-Graduate Researcher

North West University, Potchefstroom, South Africa

- Conducted comprehensive research on RFID technology, specifically investigating barriers to industrial adoption and developing practical solutions.
- Performed extensive analysis of RFID industry applications, software architecture, and security protocols.
- Designed and developed hardware prototypes (including mobile Bluetooth-controlled RFID readers) and complete software systems (web and mobile applications) for diverse RFID implementations.
- Collaborated with industry professionals to contribute research for my then Master's degree while creating real-world solutions.
- Authored technical protocols for both hardware and software systems.
- Demonstrated ability to bridge academic research with industrial applications, combining theoretical knowledge with hands-on development across multiple platforms.



EDUCATION AND QUALIFICATIONS

Jan 2013 - Dec 2016

Bachelor of Engineering

North West University, Potchefstroom, South Africa

Studied Computer and Electronic Engineering, acquiring core skills in:

- Electronics
- Embedded systems
- Programming
- Data analytics

Developed expertise in designing systems that bridge the physical world and users with computers and the internet.

Focused on creating solutions that drive efficiency, enable Internet of Things (IoT) applications, and support data-driven decisions.

Gained end-to-end design capabilities highly valued across diverse industries like telecommunications, aviation, finance, and software development.



SKILLS

System Design & Development	★ ★ ★ ★ ★
Problem Solving	★ ★ ★ ★ ★
Technical Documentation	★ ★ ★ ★ ★
Data Analysis & Interpretation	★ ★ ★ ★ ★
Programming (Python, Java, C#, etc)	★ ★ ★ ★ ★
Web Development	★ ★ ★ ★ ★
Linux	★ ★ ★ ★ ★
Cross-functional Collaboration	★ ★ ★ ★ ★
Research & Development	★ ★ ★ ★ ★



CERTIFICATIONS

CCNA (Cisco Certified Network Associate)
SolidWorks Certified Associate



REFERENCES

References available on request.
