PHATHU SIGAMA

BCom Information Systems | Cape Town, South Africa
phathu.sigama23@gmail.com · 071-742-6112

PROFESSIONAL PROFILE

Final-year Bachelor of Commerce (Information Systems) student at the University of Cape Town with a strong interest in software development, cloud technologies and building scalable technology solutions. I enjoy turning ideas and business requirements into functional applications, working across the software development lifecycle from requirements and system design through to development, testing and deployment.

My experience includes developing software and IoT applications, working with technologies such as Python, C#, FastAPI, ASP.NET, PostgreSQL and cloud platforms, as well as exposure to enterprise systems consulting and business process digitisation. I am seeking a software development internship where I can strengthen my engineering skills, contribute to real-world projects and gain experience working within a professional development team on larger production systems.

EDUCATION

Bachelor of Commerce in Information Systems — Expected completion: 2026
University of Cape Town

National Senior Certificate — Completed: 2023
Crawford International Ruimsig

Subjects Accounting · Computer Applications Technology · Life Orientation · Business Studies · Information Technology · Mathematics · English Home Language · Afrikaans First Additional Language

PROFESSIONAL EXPERIENCE

Information Systems Tutor — Feb 2025 – Jun 2026
University of Cape Town

- Facilitated weekly tutorials for INF1002F/S students, supporting a large first-year cohort.
- Assisted students with systems analysis, Excel, Python and core Information Systems concepts.
- Guided students through practical coursework and assignments, and ran consultation sessions to strengthen understanding.
- Fostered collaborative learning and critical thinking, developing strong communication, mentoring and leadership skills.

Information Systems Intern — One-month vacation internship
DotBlack

- Participated in client consultation and solution discovery meetings.
- Analysed API documentation to understand integrations with the Symbility platform.
- Assisted in translating business requirements into high-level implementation plans.
- Worked alongside implementation consultants on systems integration and deployment, gaining practical exposure to REST APIs, enterprise software projects and technical documentation.

Volunteer Work
She Is Power (Non-Profit Organisation)

- Led the digitisation of the organisation's payment collection process, introducing and implementing the Yoco payment platform.
- Redesigned payment collection and reconciliation workflows, replacing manual processes with digital systems.
- Developed structured systems for recording and managing payments, improving financial administration.
- Worked with stakeholders to identify operational challenges and recommend technology-driven solutions.

TECHNICAL PROJECTS

UrbanHive / HiveMind — Smart Beehive Monitoring Platform In progress

University team project | Software Developer | www.beehivemind.co.za

Python · FastAPI · CouchDB · MQTT · ESP32/C++ · JavaScript · HTML/CSS · JWT · bcrypt · GitHub Actions · Docker

- Developed an end-to-end IoT platform that collects real-time beehive data from ESP32-connected sensors via MQTT and HTTP and presents it through a responsive monitoring dashboard.
- Built the Python/FastAPI backend with JWT and bcrypt authentication, sensor validation, duplicate detection and CouchDB persistence.
- Implemented alerts, device-health monitoring, reporting, browser-based device onboarding, Home Assistant and Telegram integrations, and automated deployment.

Touchline - Sports Data Platform

Python · FastAPI · SQLAlchemy · PostgreSQL/Supabase · Sportmonks API · APScheduler · HTTPX · Flyway · Docker

- Contributed to the backend design and development of a football data platform for collecting and processing sports statistics.
- Handled data modelling, API integration and database design for match and player statistics.
- Implemented automated scheduling and data synchronisation to keep datasets current.

SANPC Credit Customer Onboarding

Business Process Improvement Project | SANPC (SFF)

- Collaborated in a five-person team to analyse and redesign customer onboarding through credit establishment.
- Developed IGOE process scoping and Tableau reporting prototypes to identify delays, track document exceptions and monitor onboarding performance.
- Recommended improvements to turnaround times, accountability and credit controls.

TECHNICAL SKILLS

Languages Python · C# · C++ · SQL · JavaScript · HTML · CSS

Frameworks & APIs FastAPI · ASP.NET · REST APIs · HTTP

Data & IoT PostgreSQL · CouchDB · MQTT · ESP32 · Sensor validation · Device health monitoring

DevOps & Tools Git · GitHub · GitHub Actions · Docker · Excel · Tableau

Security & Integrations JWT · bcrypt · Home Assistant · Telegram

Business Analysis IGOE process scoping · Process redesign · Requirements analysis · Reporting prototypes

LEADERSHIP & PROFESSIONAL DEVELOPMENT

- Information Systems Tutor, University of Cape Town (2025–2026).
- Information Systems Volunteer, She Is Power.

REFERENCES

Available on request.