

Matteo Buxman

BEng(Hons) Electrical & Computer Engineering

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EXPERIENCE

Co-Founder

2026 – Present

Kwama · Cape Town

- Building a cross-border remittance and stablecoin payments platform for the SA–Zimbabwe corridor on Base L2 (USDC/ZARP).
- Designed a split-key custody architecture using Shamir Secret Sharing — Sign in with Google/Apple and biometrics, no passwords or passphrases.
- Integrated Railgun ZK privacy layer; managing FSCA CASP licensing, SARB exchange control, and IMTT compliance.
- Accepted into the GenesisBloc Incubator at the UCT Financial Innovation Hub.

Self-Custodial Smart Card Payments System

Dec 2025 – Jan 2026

UCT Vacation Work · Cape Town

- Built a self-custodial stablecoin payments system where private keys are generated and stored directly on JavaCard smart cards, never leaving the hardware.
- Implemented on-card P-256 signing via a custom JavaCard applet with full EMV-style protocol stack (GlobalPlatform/SCP03, APDU handling).
- Built an accompanying mobile application to interface with the card and broadcast signed transactions.

Power Transformer Engineering Intern

2024

Trecento · Johannesburg

- Worked on assembly and quality processes for large power transformer cores used in utility-scale substations.
- Gained hands-on experience with high-voltage electrical infrastructure and manufacturing workflows.

EDUCATION

BEng(Hons) Electrical & Computer Engineering

2023 – 2026

University of Cape Town

- Specialisation in digital signal processing and embedded systems.
- Honours project: drone-deployable GPS-disciplined acoustic positioning system for under-ice AUV navigation (SANAP / SA Agulhas II).
- Dean's List: 2023, 2024, 2025.

TECHNICAL SKILLS

Blockchain & ZK

Solidity, Foundry/Cast, Circom/Groth16, Railgun, BabyJubJub, Base L2, Shamir SS

Mobile & Backend

React Native (Expo/EAS), TypeScript, Python (FastAPI, asyncio, web3.py), Supabase

Operating Systems

Linux (Ubuntu, Debian, Tails), live USB environments, systemd, bash scripting

Cryptography

Passkey auth (Google/Apple), JavaCard P-256, GlobalPlatform/SCP03, EMV, ECDSA

Signal Processing

DFT/DTFT/Z-transform, IIR/FIR filters, TDOA multilateration, CDMA/TDMA, chirp signals

Networking

TCP/IP, DNS, DMARC/SPF/DKIM, custom binary protocols, LoRa/TDMA, REST/WebSockets

PROJECTS

LeSimulatte

2025

lesimulatte.com

- Web development company co-founded with my brother, building websites and web applications for clients.

OneMoreMeal

2024

Personal

- Food donation platform with QR-code-based meal tracking so donors and recipients can follow individual meal movements end-to-end.

UCT Automarker Redesign

2023

Personal

- Redesigned the UCT automarker interface — cleaner submission flow, clearer feedback, and improved student accessibility.

Breadboard Computer

2022

Personal

- Built a fully functional 8-bit computer from scratch following Ben Eater's course — CPU, RAM, ALU, clock, and display modules.