



STEPHAN BREDENHANN

Third-year BIT (Information Systems) Student - University of Pretoria

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PROFILE

Third-year Information Systems student with practical experience across the systems development lifecycle; from requirements analysis and data modelling to full-stack implementation. Built independent projects covering role-based access design, real-time data tracking, and multi-source API integration, alongside a year of tutoring in Information Systems coursework. Brings a graduate-level blend of analytical rigour and hands-on delivery: able to translate business requirements into structured systems designs, then build and ship those designs end-to-end. Comfortable moving between technical implementation and stakeholder-facing communication, with a track record of picking up new tools and domains quickly. Ready to bring this combination of analytical thinking, delivery, and clear communication to an IT systems or business analysis internship/graduate role.

WORK EXPERIENCE

University of Pretoria

Feb 2025 – Nov 2025

Information Science Department Tutor

- Tutored first-year students in INL 110 and INL 120, reinforcing core Information Systems concepts through one-on-one and small-group support
- Marked assignments and gave structured feedback, building communication and mentoring skills directly transferable to stakeholder engagement
- Adapted explanations to individual student needs, improving comprehension of systems analysis and database concepts

Buffelsfontein Beesboerdery

Mar 2024 – Present

Part-Time Bartender

- Balanced full-time study with part-time work, sharpening time-management and prioritisation
- Delivered consistent customer service in a fast-paced environment, strengthening client-facing and operational-efficiency skills

PROJECTS

Community Road Paving Crowdfunding Platform - Paid Freelance Project - Angular, TypeScript, .NET Core, C#, Azure

- Analysed requirements and designed a full-stack system allowing residents to collectively fund road paving by purchasing 1 m² sections on an interactive map
- Defined role-based access control for buyer and administrator user types and designed real-time construction-progress tracking

Better Notes - Local-First AI Notes App - React Native, Expo, TypeScript, SQLite

- Designed and built a local-first Expo/React Native app that converts freeform voice or text input into structured todo, note, and grocery updates via a bring-your-own-key OpenAI-compatible API, with no app-owned backend or accounts
- Implemented a layered architecture separating UI, domain logic, and AI/storage integration, including context-packed prompts, JSON schema validation with retry handling, transactional updates, and one-level undo

ADS-B Flight Tracker (South Africa) - Angular, TypeScript, Leaflet

- Designed and built a live-data system integrating two external APIs (airplanes.live for aircraft data, planespotters.net for imagery) into a single interactive map interface centred on South Africa

Personal Utilities - HTML, CSS, JavaScript, TypeScript, Python, Node.js, GitHub Pages

- Background Remover: removes image backgrounds entirely in-browser, on device
- Free QR Code Maker: generates QR codes for links, contacts, and plain text
- API for Cursor Debian (forked from the macOS app API for Cursor): local OpenAI-compatible API proxy bridging AI coding agents to Cursor's proprietary models, running entirely on-device via a local Workers runtime and Node.js SDK bridge with custom protocol translation

SKILLS

Analysis & Design: Requirements analysis, systems design principles, UML modelling, process mapping

Databases: RDBMS, SQL, data modelling

Development: Python, JavaScript, TypeScript, C#, .NET Core, Angular, Ionic, Node.js, C++, HTML/CSS

Tools & Platforms: Git, Azure, Jupyter Notebooks, NumPy, Matplotlib, Windows, Linux

Languages: English (fluent), Afrikaans (fluent)

EDUCATION

University of Pretoria

2024 – 2026 (expected)

B.I.T. (Information Systems) · 76% (Year 1) · 71% (Year 2) · 76% (Year 3, Sem 1)