

# Carlo Schluter

AI Solutions Engineer · Full-Stack Developer

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## PROFILE

Full-Stack Developer and AI Solutions Engineer based in Gauteng, South Africa. With over 25 years of experience building production software systems across a wide range of industries, I am currently on a focused journey into AI — working through prompt engineering, AI workflow automation and AI solutions engineering in a structured, hands-on way. I bring deep engineering experience, a clear understanding of how AI actually works, and the ability to translate complex ideas into practical solutions for South African businesses — without the jargon, without the overwhelm.

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## EXPERIENCE

### AI Solutions Engineer & Full-Stack Developer — Independent · June 2026 – Present · Gauteng, SA

Building end-to-end AI solutions for South African businesses alongside an active full-stack development practice.

- Building AI-powered web solutions — custom chat assistants, intelligent search and document Q&A systems
- Designing and implementing workflow automation pipelines using n8n and similar tools
- Prompt engineering and LLM API integration using Anthropic Claude and OpenAI APIs
- Delivering full-stack development across Java, Spring Boot, PHP, JavaScript and related technologies

### Full-Stack Developer — Karoo Logic · April 2025 – May 2026 · Pretoria, Gauteng

Development on a large-scale civil engineering project document management platform — a complex, multi-module enterprise system built on Java, Spring Boot, MySQL and a modern JavaScript frontend.

- Architected and delivered core platform modules including project tracking, document management, financial reporting and timesheet management
- Designed and optimised a complex MySQL database layer — stored procedures, views and query optimisation ensuring data integrity and performance at scale
- Built sophisticated frontend interfaces using Bootstrap, jQuery, DataTables and jsTree with emphasis on usability for non-technical end users
- Established development standards, testing processes and documentation practices supporting long-term maintainability

### Full-Stack Developer & Consultant — Independent · March 2021 – April 2025 · Pretoria, Gauteng

Ran an independent practice providing web development, digital strategy and technical consulting to a diverse portfolio of South African clients.

- Designed and developed custom web solutions (WordPress, PHP, MySQL) tailored to specific client business requirements
- Managed end-to-end digital presence for clients including social media strategy, content and paid campaign management across Facebook, LinkedIn, Instagram and YouTube
- Developed the commercial and communication skills to work effectively with non-technical business owners and decision-makers

### Full-Stack Developer — Camara Consulting · October 2020 – January 2021 · Johannesburg (Remote)

Short-term contract role focused on data integration and system enhancement work for financial services clients.

- Built ETL processes using stored procedures to export and transform complex client data for integration with CRM systems
- Worked extensively with MS SQL Server and C# handling large, complex databases requiring careful data management and transformation
- Enhanced an online financial system with new functionality and critical change requests

### Full-Stack Developer — Dracore (now LeadSquared) · February 2019 – September 2020 · Johannesburg (Remote)

Full-stack development on a CRM platform serving real estate agents nationwide, with a focus on campaign automation and client communication tools.

- Developed and maintained critical CRM modules for a platform serving real estate agents across South Africa
- Built a dynamic template-based campaign editor enabling automated personalised communications at scale
- Integrated bulk email marketing via API — giving clients direct campaign execution capability from within the CRM
- Worked with C#, MS SQL Server and JavaScript across a large-scale multi-tenant platform

### Full-Stack Developer — Manstrat AIS · September 2013 – December 2018 · Pretoria

Five years building a sophisticated mobile and data platform for smallholder farmers across South Africa — one of the more technically complex and socially meaningful projects of my career.

- Led development of a hybrid Android mobile application (Cordova, AngularJS) serving smallholder farmers with real-time agricultural data
- Architected a real-time commodity pricing system integrating live JSE SAFEX data — giving farmers daily market visibility previously unavailable to them
- Built a GIS mapping system displaying agricultural infrastructure across South Africa using Leaflet and Google Maps
- Implemented geolocation-based access verification and SMS-based user registration with verification middleware
- Integrated a comprehensive weather forecasting system providing weekly agricultural planning data

#### **Full-Stack Developer** — [Select Music](#) · April 2012 – June 2013 · Randburg / Cape Town

Full-stack development on a digital music e-commerce platform, focused on online sales, social media integration and secure payment processing.

- Built a full-featured e-commerce platform for digital audio track sales with integrated payment processing and automated delivery
- Integrated social media marketing via Facebook and Twitter APIs to drive music release engagement
- Implemented user authentication, SSL security and an automated MP3 upload and metadata management system

#### **Full-Stack Developer** — [Various](#) · 2002 – 2012 · Gauteng, South Africa

A decade of progressive software development across a wide range of industries and technologies, building a strong foundation across the full development stack.

- Developed facility management and biometric security systems for a major South African telecommunications provider
- Built and maintained medical aid claims processing, broker management and HR procurement systems
- Developed student portals and procurement reporting systems for university environments
- Contributed sensor testing and systems updates for 2010 FIFA World Cup venues
- Built e-commerce platforms with payment gateway integration and automated order management
- Worked across Classic ASP, Visual Basic, C#, MS SQL Server and early web technologies throughout this period

## SKILLS

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**AI & Emerging Technology:** Prompt Engineering · LLM Integration · AI Workflow Automation · AI Solutions Engineering · Retrieval-Augmented Generation (RAG) · n8n · Anthropic Claude API · OpenAI API · LangChain

**Backend Development:** Java · Spring Boot · PHP · Node.js · C# · Classic ASP · Python (learning) · RESTful API Design · MySQL · MS SQL Server

**Frontend Development:** JavaScript · jQuery · Bootstrap · Tailwind CSS · HTML5 · CSS3 · AngularJS · Astro · DataTables · jsTree · Summernote

**Tools & Platforms:** Git · Bitbucket · VS Code · Netlify · Nginx · JasperReports · Crystal Reports · Reporting Services · Postman · TortoiseGit

**Other:** Full Software Development Lifecycle · Technical Communication · Agile Methodologies · Team Leadership

## EDUCATION

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**Diploma in Computer Science** — [Oxford College of Education](#) · 1995 – 1996

## CERTIFICATIONS & PROFESSIONAL DEVELOPMENT

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**Claude Code Fast-Track** — **Solve Anything, Automate Everything** — [Udemy](#) · 2026

**Junior Management Training** — [SEESA](#) · 2014

**Workflow Architecture and Design** — [K2](#) · 2003

**Microsoft Visual Basic Desktop Development** — [IT Intellect](#) · 2001

**Microsoft Site Server 3.0 (CMS)** — [ITIQ](#) · 1999

**Currently deepening:**

- Prompt Engineering & LLM Systems — Anthropic documentation, LangChain, hands-on RAG development
- AI Workflow Automation — n8n, automation pipelines, system integrations
- AI Solutions Engineering — Anthropic API, cloud deployment, production AI systems