

Carl Wilcocks

AI Engineer | Agents, skills and integrations

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PROFILE

I graduated in Industrial Engineering in December 2025 and now work as a fullstack developer on a three-person team. My work includes a production agent for class action loss calculations, Claude skills used by the operations team, and AWS and Salesforce integrations. I also co-founded Eidetic, a Shopify app we developed to within a few weeks of App Store submission.

EXPERIENCE

Fullstack Developer · WTax

Jan 2026 – Present

Part of a three-person development team building on AWS and Salesforce for a global withholding tax reclaim firm.

Agent engineering

- Sole engineer on an AI agent that calculates recognised losses for securities class action settlements. It reduced each case from days of manual work to about 10 minutes. Used on around 30 production cases, with results matching law-firm-verified losses to the cent.
- Built the agent to write a case-specific Python calculator, then check it through static review, sandboxed Code Interpreter runs and property-based invariants. Failed checks feed into the next attempt. In model comparisons, GLM-4.7 needed 4–5 attempts; Claude Opus passed on the first or second.
- Co-built the surrounding pipeline across 12 Step Functions state machines. It extracts notices from Salesforce with Textract, invokes the agent, runs the calculator in a temporary Lambda with up to 40 concurrent runs, returns results to Salesforce and removes the Lambda.

Claude skills and connectors

- Built and tested 10+ Claude skills for manual operations tasks, comparing results with and without each skill and revising it. The e-filing skill reduced completing class action templates from about a day to a few minutes plus human review. The whole operations team uses it.
- Connected Salesforce to Claude through a read-only MCP app. Operations staff use it for reporting, and developers use it to give Claude live context when building Salesforce features.
- Led the rollout of a dedicated Claude organisation for the securities class action division. As admin, distribute skills across Claude Code, Desktop and chat, including a OneDrive-synced folder symlinked into Claude Code. Selected skills also run in Codex.

Salesforce and AWS development

- Built Lightning record pages in App Builder and later as Lightning Web Components. Added an OAuth 2.0-secured route from Salesforce to Step Functions using API Gateway, Lambda and Cognito, plus a DynamoDB distributed lock with EventBridge Scheduler to prevent concurrent case-processing runs from colliding.

EXPERIENCE **Co-founder & Lead Engineer · Eidetic**

Feb 2026 – Jul 2026

- Built a Shopify app that audits stores for AI-search (GEO) visibility and drafts content changes for merchants to approve. Used Next.js, Supabase Edge Functions and the Claude API. Completed Shopify OAuth, App Bridge, billing and GDPR webhooks; the app was close to App Store submission.
- Restricted the content agent to approved Shopify fields, with merchant-reviewed diffs, a source-hash check to block stale changes, and rollback to the stored original. Used Haiku for extraction, Sonnet for brand voice and Opus for content.
- Stopped development before launch after competitive analysis showed Shopify had released most of the same features natively and for free. This met the criteria we had agreed for closing the product.

PROJECTS **Local receipt agent**

Python · Ollama · Qwen2.5-VL · Jul 2026

- Built a receipt organiser for South African slips that runs entirely on a MacBook. A local vision model extracts receipt fields into a fixed schema. Python handles duplicates, SA VAT rules including zero-rated groceries, validation flags, merchant memory and an append-only ledger.
- Receipts require human review by default. Automated processing is gated by a field-level evaluation harness, with accuracy targets of at least 95% for totals and dates and 90% for category.

Lynnwood Cyclery concept site

Next.js · GSAP · Lenis · Sep 2026

- Built a website redesign to pitch to a Pretoria bike shop: scroll-driven animations, a 22-product catalogue, service and test-ride booking, and a finance calculator. The proposed migration keeps Shopify as the headless backend.

SKILLS

Agents & LLMs: Amazon Bedrock AgentCore (Runtime, Code Interpreter, Identity, Observability) · Strands Agents SDK · Claude API (model routing across Opus / Sonnet / Haiku) · local vision models via Ollama (Qwen2.5-VL) · structured outputs

Skills & MCP: Claude skills (build, test, distribute) · MCP connectors (Salesforce, Blender) · Claude Code · Codex · Claude org administration

Evals & reliability: validation harnesses · property-based invariants · sandboxed execution · model benchmarking · field-level accuracy evals · human-in-the-loop gates

Cloud & backend: AWS Lambda, Step Functions, S3, DynamoDB, EventBridge Scheduler, API Gateway, Cognito, Textract · Supabase (Postgres, Edge Functions) · Python, TypeScript, SQL

Frontend: Next.js, React, Tailwind, GSAP · Salesforce Lightning Web Components & App Builder · Shopify App Bridge & Polaris

Integrations & delivery: Salesforce · Shopify Admin API (OAuth, Billing, webhooks) · OAuth 2.0 · Vercel · GitHub · Vitest

EDUCATION **BEng Industrial Engineering · University of Pretoria · 2025**

- Studied operations research, simulation modelling and systems engineering.
- Final-year project: inventory management system for J-Mount using EOQ and reorder-point models.

Certifications

- **AWS Certified AI Practitioner:** in progress
- **Prompt Engineering Specialization:** Vanderbilt University (Coursera)

Languages

English · Afrikaans