INTERNSHIP OR THESIS · FLEXIBLE START, NOW

AI Engineering Intern Full-Stack · Claude / Codex (m/f/d)

Start: now | **Mandatory internship, up to 3 months voluntary, or thesis** | **Paderborn / hybrid** | **English or German**

You want your code in production, not in a drawer?

- You've asked an AI agent to build something and then wondered how to make it actually reliable.
- You'd rather ship one feature real users touch than ten tutorial projects.
- "Evals", "tool use" or "MCP" make you curious, not nervous.
- You're looking for an internship or a thesis topic with a live product and a real customer.

About TreueTakt

TreueTakt is SaaS for **home-care and everyday-support services** in Germany. They help elderly people with shopping, housework or doctor visits and bill the care insurance for it. Most still use Excel and paper. TreueTakt handles scheduling, mobile time tracking, signed service records and invoicing. It is **in daily production use** at a real care service and part of the **garage33 Incubator** at Paderborn University.

The market: **over 20,000 recognized everyday-support services** in Germany, and people in need of care hold about **€7.7 billion a year** in relief budget (Entlastungsbetrag) that is billed through services like these.

What you'll work on

- **Ship an AI feature end to end:** Caregivers already dictate visit notes that Claude turns into structured reports. You make that measurable and own the next feature like it, from prompt to UI to production.
- **Make it measurable:** Build an eval set on realistic, pseudonymized data and a test pipeline so we know when a prompt or model change makes things better or worse.
- **Build agent tooling:** e.g. an MCP server on top of TreueTakt data, or agents that check invoices or speed up onboarding new customers.
- **Work like a modern team:** Use Claude Code and Codex every day, review AI-written code critically and write tests (Vitest, Playwright).
- **See the user:** Join a customer call and watch how caregivers actually use what you built.

> **Thesis option:** Bachelor's or master's thesis, or a university project, on LLM evaluation, agentic workflows or AI in care documentation. A live product, real users and a supervisor from industry.

A day in the life

09:30	Quick sync with Daniel: what ships this week?
10:00	You run your eval set against a new prompt. Accuracy goes from 81% to 88%, but one edge case breaks.
12:00	You pair with Claude Code to fix it, then write the test so it never comes back.
14:00	Code review together, then merge. The preview deploy goes to a real care service.
16:00	Ten-minute call with a caregiver who used it this morning. You write down the next three improvements.

What you need

MINIMUM QUALIFICATIONS

- Enrolled in computer science, data science or a related program.
- You can write code in TypeScript/JavaScript or Python.
- You know your way around Git.
- You've used an AI coding tool (Claude Code, Codex, Cursor, Copilot) on a real project.

PREFERRED QUALIFICATIONS

- React / Next.js, SQL / Postgres.
- You've worked with the Claude or OpenAI API (tool use, structured output).
- Experience with tests or CI.
- German skills, helpful for customer calls but not required.

Not every box ticked? Apply anyway. Curiosity and shipped side projects count more than grades.

What you get

Production from week one
Your code reaches real users, not a sandbox.

Hands-on AI engineering
Evals, agents, MCP and coding agents on a real product. This is what employers are asking for right now.

1:1 with the founder
Regular code reviews and direct feedback, with no layers in between.

Certificate and reference
A detailed internship certificate (Zeugnis) and a personal recommendation if it goes well.

Honest about pay
This internship is unpaid. It is possible as a mandatory internship, a voluntary internship of up to 3 months, or a thesis. If it clicks, we'd love to keep building together.



Hi, I'm Daniel. CS master's student from Paderborn. I built TreueTakt together with a care service in East Westphalia. You work directly with me, and every application gets a personal reply.

How to apply

Send your CV, your program, the time frame that suits you and whether it's a mandatory internship or a thesis.

Add a link to something you've built (GitHub, a demo, a notebook). No cover letter needed.

Scan to apply
treuetakt.de/k/ai
info@treuetakt.de

We welcome applications from everyone, regardless of gender, origin, religion, disability, age or sexual identity.