Dear Romansss,

I'm very interested in learning more about the role and would be happy to address your initial questions:

Employment Form: I'm open to discussing both options, freelancer status or employment through the Austria GmbH during our call to find the most suitable setup for both sides.

Remote Work & Team Meetings: I also believe occasional physical meetings can greatly improve team work collaboration and shared learning. My suggestion would be:

- **Frequency:** Every two weeks
- **Location:** Rotating between team member locations or Southern Germany with good transport links
- **Duration:** 1-2 days to allow for deep collaboration and relationship building
- **Goals:**
    - Strengthening team bonds
    - technical workshops and progress update
    - Coordinate on roadmap planning

Open-Source Mapping Experience:

- FusionLab bridge 3D City Model (Oct 2023–Feb 2024)

I most recently worked on open source map would be the FusionLab bridge model project, where we developed a high-performance 3D city visualization model combining semantic and geometric data. The backend was based on the open-source 3D City DB (PostgreSQL + PostGIS), with CityGML data transformed into glTF for web rendering using a CesiumJS-based, frontend - 3dcitydb-web-map (developed by TUM' s Chair of Geoinformatics). We implemented custom PostgreSQL views to manage complex lane and bridge semantics, and integrated terrain and building data via Bavaria's public Cesium 3D Tiles services.

The bridge model workflow included a multi-step pipeline (IFC → ArcGIS → FME → Cesium). While the specific implementation is not public, I'd be happy to discuss the architecture, ETL process, and lessons learned during our call.

LLMs for Work: I've had quite immersive hands-on experience across different foundational LLMs and related tools. And I briefly summarize them into 3 phases.

Phase 1: Ask mode

When I first started using AI tools, I was basically just throwing questions at them to see what would stick. It was all about figuring out what worked and what didn't.

GPT-4: My go-to model, reliably helping me tackle a wide variety of tasks and establishing a dependable boundary for conversational AI in everyday work.

I tried DeepSeek early on, but honestly? It was slow and the code it wrote wasn't great. I quickly moved on from that one.

Claude Sonnet 3 was interesting, it had this way of organizing information that I really liked, and it was great at pulling together resources from different places. But it would go on and on sometimes. I'd ask a simple question and get a dissertation back. That's when I started bouncing between Claude and GPT-o3 depending on whether I wanted depth or just a straight answer.

When **Sonnet 4** came out with free access, I jumped back. Better performance, no cost - easy choice while I still subscribe gpt, accessible to **gpt-o4** which has a good code understanding and tasks separation.

Perplexity was my secret weapon for research. The way it could search the web in real-time and actually cite sources? It use rag 2.0, answers are really related and enhanced. Game changer. I saved it for when I really needed to dig deep into something, partly because of the daily limits (3 times for free users).

Phase 2: Agent mode

Once I got comfortable with the basics, I started pushing boundaries. Instead of just asking questions, I wanted these tools to actually execute tasks and work together.

OpenAI's Deep Research blew my mind when I threw massive documents at it. Suddenly I could analyze hundreds of pages without reading them myself.

The coding assistants (**Copilot, Cursor, trae**) changed how I worked day-to-day. Agents code work really crazy! Having something that could complete my code, catch bugs, and suggest improvements in real-time. That was when AI stopped being a cool experiment and became part of my actual workflow because it can understand long context and execute tasks independently, yes, vide coding. And they work all quite well, sometimes I just use all of them to solve different problems, but honestly, I get most used to trae ui design, the details are better.

Kiro was probably the most recent one, another innovation, I could give it a task in plain natural language, and it would break it down, execute each piece, and even write tests. Completely hands-off automation. But due to the huge requests, the connection is not very stable, so it is not yet into my real workflow.

I also spent time in Allianz building one npl-to-sql agents using Ollama with LLaMA and Azure OpenAI. The coolest project was probably the one where I used LlamaIndex to let people talk to databases in natural language. "Show me sales from last quarter" would automatically become SQL queries.

Phase 3: orchestration

Now I'm at the point where I'm not just playing with these tools - I'm using them to solve actual business problems and deliver real value.

AllianzSearch was a big project where I helped build an internal search engine using SearxNG. We had to balance finding information quickly with keeping sensitive data secure, pulling from both internal and external sources. It was complex, but that's where having experience with different AI approaches really paid off.

Currently, I'm working on Digital Twin Metadata Standards for Construction with industry partners. This one's interesting because I'm comparing outputs from GPT-4-mini, Claude, and Perplexity to see which one best handles technical standards like Open Digital Twins and Smart Cities Ontologies. It's not just about getting an answer - it's about getting one that's actually implementable and verifiable.

Best Web Map Experience: I' m not even sure what you mean by "best" here, do you mean UI design or powerful data enrichment? From my own experience, I loved Mapbox Studio back in my undergraduate for its predefined styles and custom adjustments that let me craft truly bespoke maps, but when I needed up-to-date open datasets, seamless data integration, and built-in spatial and statistics analysis and dashboards. ArcGIS Online was unbeatable for turning raw geodata into an intuitive, interactive dashboard.

Preferred Start Date: I would be available to start in 3 weeks , allowing time for proper transition of current responsibilities. but to be honest I'd like to start as soon as possible, I cant wait to devote into the new projects.

Central Questions:

- What GIS challenges is the team currently tackling, and where do you see it in five years?
- All the team members support each other for one project or everyone in charge of their own projects?
- How does the digital twins technology integrate with your insurance sector applications?
- What is the team's current tech stack and development methodology?
- What are the primary success goal for this role in the first 6 months?

Available Time Slots (Week of [Date]):

- 31.07.2025 (next Thursday) 10:00-12:00 CET or 14:00-17:00 CET
- 01.08.2025 (next Friday) 09:00-11:00 CET or 14:00-17:00 CET
- 04.08.2025 (monday after next week) 10:00-12:00 CET or 14:00-17:00 CET

I look forward to our discussion and learning more about this opportunity to contribute to your team's innovative work in GIS technology.

Best regards,

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