Week 1: Capstone Search Kickoff

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Where I'm Looking & Conversations So Far

My search focuses on two directions: the public sector and the telecommunications industry. The most advanced lead is with a Budapest district government involved in an EU-funded climate resilience project. They have an existing codebase (`https://github.com/CLIMAAX`) and a v1.0 prediction model. I've discussed developing a "v2.0" iteration with their project leads, where better predictions could directly influence population well-being.

Parallel to this, I am leveraging my role at Deutsche Telekom to explore opportunities within DT and Magenta Telekom. This path utilizes my field expertise, though conversations are less mature. I am currently identifying internal projects that fit the academic scope.

What Makes a Good Capstone & My Biggest Challenge

My primary challenge is distinguishing between a "data project" and a "decision project." For the government proposal, data availability is excellent, but I must ensure the goal isn't just "improve accuracy." I need to define the specific *decision* (e.g., budget allocation, alert thresholds) that changes if model performance improves.

For the Telco path, the challenge is finding a problem requiring predictive modeling rather than just rules or dashboards. My fear is spending months on data cleaning only to find a simple heuristic suffices. Securing a clear target variable and a stakeholder who distinguishes "analytics" from "reporting" is the main hurdle.

Messy Situation Practice

Scenario: Sponsor says, "We have tons of data. Just explore it and find interesting things."

Response:

"Thank you for the access. To ensure I deliver actionable insights rather than just trivia, could we identify a specific business decision you are facing or a metric that is underperforming? Anchoring the analysis to a concrete problem will help me cut through the noise and focus on finding value you can actually use."

Reflection

This week highlighted my tendency to prioritize technical feasibility (e.g., "is the data there?") over business impact. I realized I am more comfortable discussing architectures than digging for the "why." Moving forward, I will consciously start conversations with the business problem to avoid technically perfect but useless solutions.