

AI-Native Product Engineering Interdisciplinary Project

We are Arcadia:

Arcadia Network is a EXIST funded vertical HR-tech startup that turns open-source data into actionable talent intelligence: an AI-driven OSINT platform that helps executive search firms find top leaders, and a Talent Matching Engine product that connects pre-vetted senior talents with high-impact roles.

Track 1: Full Stack Development

We are looking for **Product Engineers** who understand that code is a tool to solve business problems. In this IDP, You will work at the intersection of Full Stack Development and Product Automation, designing systems that run complex workflows.

Your Core Focus:

- **Platform Scalability & Optimization:** You will optimize the existing platform for performance, security, and scalability as we handle increasing user loads.
- **Full Stack Implementation:** Development of robust backend services (Python/Node.js) and reactive frontend interfaces (React/Next.js), ensuring type safety via TypeScript.
- **DevOps & CI/CD:** Optimization of deployment pipelines (GitHub Actions) to ensure reliable and automated delivery processes.
- **Frontend Optimization (React/Tailwind):** You will work with our existing codebase. You will refactor legacy components to be cleaner, faster, and more responsive.

Ideal for you if: You are confident in JavaScript/TypeScript (React/Next.js, Node.js) and have basic SQL knowledge.

Track 2: AI-Engineer

We are seeking a Pragmatic AI Engineer. You will operate at the intersection of Scientific Research and Product Engineering. You will ship production-grade code that directly impacts our user conversion rates.

Your Core Focus:

- **Scientific Rigor:** You approach the problem scientifically. You formulate hypotheses (e.g., "Adding skill-adjacency vectors will improve relevance"), design experiments, and measure results.
- **Engineering Practicality:** You build for the real world. You care about inference latency, cost efficiency, and API reliability. A model that is 1% more accurate but takes 10 seconds to run is a failure.
- **Product Alignment:** You optimize for Business Metrics (Successful Matches), not just academic metrics (F1 Score). You understand why a match makes sense to a human recruiter.

Your Core Focus:

- **Algorithm Development:** enhancing our core matching engine using NLP techniques (e.g., LLMs, RAG, Vector Embeddings)
- **Evaluation Framework:** Building a systematic testing pipeline ("Offline Evaluation") to benchmark new models against the current baseline before deploying them.
- **Production Deployment:** Wrapping your models into robust APIs and integrating them into the backend infrastructure.

Ideal for you if: You have strong proficiency in Python (Pandas, PyTorch/TensorFlow). Experience with Vector Databases (Pinecone/Weaviate) and LLM Orchestration (LangChain/LlamaIndex) is highly desirable.

What you get:

- You will earn **16 ECTS** credits at TUM.
- Exclusive access to TUM Incubator, entrepreneurial coaching, and workshops.
- Network with industry leaders, founders, and senior professionals.

Key Facts:

- 6 months part-time (approx. 20 hours/week) or alternatively, 3 months full-time.
- Ideally 2–5 Master's students, but individual applications are also welcome.
- Project can start immediately or upon agreement. Latest possible start: 15 April 2026.
- **Application:** Send your CV and a short motivation statement to talent@arcadianetwork.io

