

## Scholé

# Integrating AI and Data Science Skills into Your Professional Role

### In a nutshell

Scholé is an AI-driven personalized learning platform redefining how professionals learn new technologies: using the best of AI to teach AI effectively. Designed for those balancing demanding careers, Scholé leverages advances in expert-curated knowledge graphs and large language models (LLMs) from EPFL's Machine Learning for Education Lab to offer highly personalized, flexible, and job-relevant learning experiences.

Unlike traditional online course platforms, where adult learners face high dropout rates due to rigid, one-size-fits-all formats, Scholé embraces a learner-first philosophy. Our platform offers flexible content delivery (video, audio, podcasts) in bite-sized blocks, constantly adapting to the user's progress.

### Why is our technology important?

Modern professionals need to stay ahead in a rapidly evolving AI-driven world, but traditional education models don't fit their busy schedules. Scholé tackles this challenge by:

1. Offering real-world relevance through role-specific learning paths.
2. Enabling personalized and adaptive learning to both short-term and long-term learning needs.
3. Providing flexibility and accessibility for diverse learning styles, languages and contexts.

The core of Scholé's innovation lies in 1) an explainable graph-based recommender system to deliver tailored learning experiences and 2) a technological advance in multimodal generation to modify content across contexts and learning formats (e.g. videos, podcasts, readings, interactive conversation). Scholé's knowledge graph organizes a vast array of open-source materials in AI and data science, mapping connections between concepts, skills, and their prerequisites. This allows for the creation of logical, well-informed paths, extracted by the explainable recommender system. By analyzing a user's current skills, role requirements, and learning progress, the system curates a sequence of content optimized for maximum relevance and impact. Scholé's also features scenario-driven learning, allowing users to practice their skills in a realistic setup without the risk of real-world consequences.

Scholé is gaining global momentum as a leader in professional upskilling; they are recent winners of the [2024 Learning Engineering Tools Competition](#) and [International Finalists of the MIT Solve Competition](#) (top 3% of 2230 teams).

### Keywords

AI Upskilling, Personalized Learning, Knowledge Graphs, Professional Training

### Founding Team

Vinitra Swamy and Paola Mejia are the co-founders of Scholé and [the first graduating PhDs from EPFL's Machine Learning for Education Lab](#) of Prof. Tanja Käser. With a strong foundation in cutting-edge machine learning research and years of collaboration in the lab, they bring expertise, enthusiasm, and a shared vision to teach data science and AI to everyone.