

Kolloquium „Statistische Methoden in der empirischen Forschung“

Wann: 02. Dezember 2025, 17:00 – 18:30 Uhr

Wo: [Campus Charité Mitte, Raum 02.002, Virchowweg 10, 10117 Berlin](#)

Online-Übertragung: der Link wird auf der [Website](#) zur Verfügung gestellt

Vortragssprache: Englisch

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Applications of Machine Learning in Educational Technology

Machine learning has shown real promise in solving specific problems in edtech—but the gap between what works in theory and what works for actual learners is often larger than expected. This talk shares lessons from building and deploying ML systems across three core areas: Placement & Assessment (using approaches like Item-Response Theory and adaptive search methods to match learners to appropriate difficulty), Content Creation (exploring how augmented large language models can generate and personalize learning materials), and Recommendations (building systems that suggest relevant learning paths). For each, I'll walk through what we built, what we thought would happen, and what actually happened when real users encountered these systems. I'll reflect on what this suggests about ML's practical potential and limitations in edtech—including the genuine value of well-designed ML systems but also where they fall short of their promise. The goal is to offer a grounded perspective on what machine learning can reasonably be expected to contribute to education.