Transforming Creative Education Through Data Science

- Harnessing NLP to analyze real-time interactions in design studios

- Mapping creativity as it unfolds during design critiques

- Bridging creative education and data-driven research

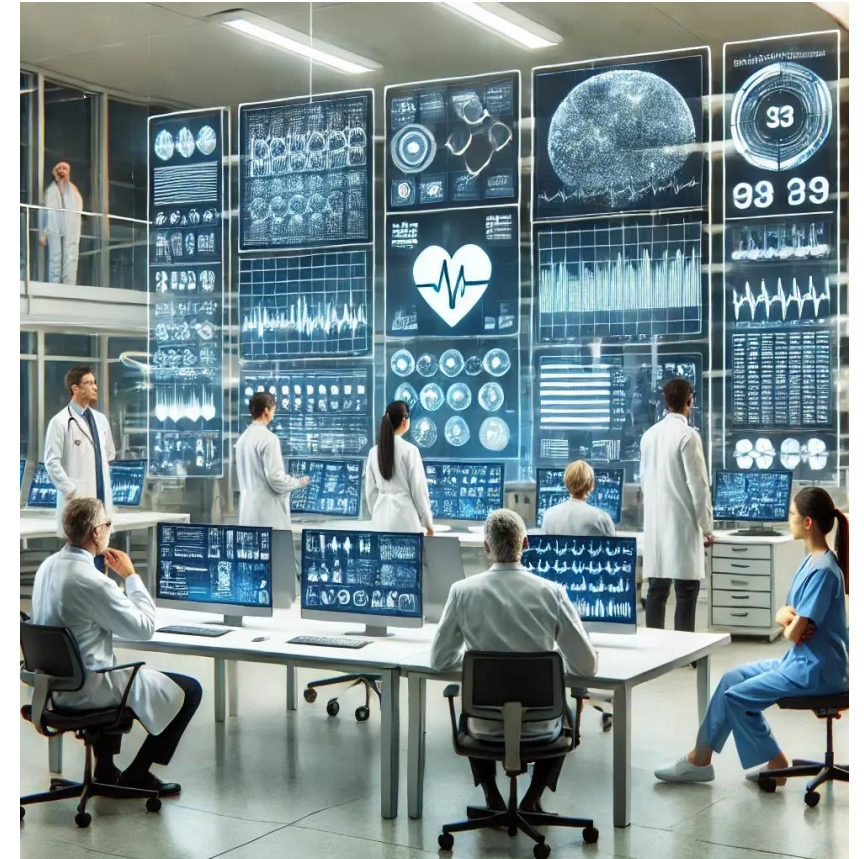- Cutting-edge work at the intersection of AI, education, and design innovation

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Medical Data Science: Turning Data Into Better Health

The Challenge Hospitals generate massive amounts of data (clinical notes, lab results, imaging, genomics, sensors). **The opportunity is to transform these complex datasets into insights that directly improve patient care.**

What We Do

- Analyze **electronic health records (EHRs)** to predict risks and outcomes

- Apply **machine learning & AI** to medical imaging, genomics, and ICU data

- Develop **privacy-preserving models** for sensitive healthcare environments

- Create **decision-support systems** that guide doctors and nurses in real time

Why It Matters Medical Data Science saves lives by making care **smarter, faster, and more personalized**. From predicting Alzheimer's risk to optimizing ICU nutrition, it is shaping the future of healthcare.

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Adversarial AI: Building Defense for the Future

- **Understand vulnerabilities** of Machine Learning to attacks (malicious tampering)

- Understand how ML can be used to **find/exploit vulnerabilities**

- Develop AI-based methods that are **robust** to attacks

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