

4.S00 / 4.S12 SPECIAL SUBJECT

# DESIGN INTELLIGENCE



Design Intelligence is a new subject that introduces students to a practical, hands-on approach to machine learning and artificial intelligence. Providing a new lens through which to engage machine learning through aesthetic, form-finding and interaction, the course introduces students to neural networks, CNNs, RNNs, GANs and large-scale generative language models, as well as how to collect and prepare data for training their own neural networks. Situated within a graphic, product and interaction design context, students learn to develop a new kind of creative practice that not only actively engages in shaping the future of artificial intelligence, but is also instrumental in addressing its biases and failures.

The course is divided into two parts. In the first half, students progress through a series of 4 short warm-up exercises that give exposure and hands-on experience to different neural network architectures and techniques. In the second half, students develop an independent project, further exploring ideas uncovered during the exercises or pursuing their own interests.

**Instructor: Marcelo Coelho**  
**Teaching Assistant: Diego Pinochet**

*T 7:00-9:00 p.m. F 2:00-5:00 p.m.*