Spring 2024 Seminar:
EE392b – Industrial AI

Time: Tuesdays, 4:30pm-5:50pm
Venue: Math Corner 380-380W (check class website for possible changes)
Coordinators: Dimitry Gorinevsky and Dan O'Neill, Consulting Professors
Prerequisites: Interest in AI applications and markets
Website: http://www.stanford.edu/class/ee392b/

Course Description

AI is transforming how the internet and cloud are managed, how medical assistance is provided, how supply chains are handled, and how industrial plants and processes are operated. Industrial AI (I-AI) refers to this digital transformation of the industrial (non-consumer) economy to an AI/ML software driven one.

Speed, complexity, and cost dynamics are transforming the competitive environment. Data analysis, modeling, and decision making now require automated AI methods that can keep-up. Consequently, the competitive dynamics and industrial structure of these industries are rapidly changing, creating opportunities for new startup entrants.

The goal of this class is to give a broad perspective on I-AI applications. The class features guest lectures from leading industry players to discuss I-AI in their respective areas. The lectures will include specific application examples and business case studies along with the big picture views.

The first lecture will provide an introduction to the subject. The lectures will include:
- Introductory Lecture, Professors Dan ONeill and Dimitry Gorinevsky
- Medical AI - Pediatric Moonshot, Timothy Chou
- Industrial AI - Overview and Example, Siemens
- AI for Genomics, Office of the CTO, Google
- AI in Business Reorganization, Bain Consulting
- AI in Process Industries, McKinsey & Co.
- AI for Human Centered Industrial Activities, Inworld.ai
- Case Study for AI Startup, Pay-i
- AI for Defense and Aerospace, C3.ai
- AIOps - AI for Data Center, Microsoft