## Spring 2021 Seminar: EE392b – Industrial AI

Time: Wednesdays, 4pm-5pm

Venue: On-line by Zoom, see Canvas and class website

Coordinators: Dimitry Gorinevsky and Dan O'Neill, Consulting Professors

Prerequisites: Interest in Industrial AI applications and markets

Website: http://www.stanford.edu/class/ee392b/

## **Course Description**

AI is transforming how things are made, how processes are controlled, and how the internet and its components are managed. Industrial AI (I-AI) refers to this change of the industrial (non-consumer) economy. Variously called Digital Transformation, Internet of Things vs Internet of People, Industry 4.0, Industrial IoT, examples abound in transportation, semiconductors, energy, robotics, telecommunications, and process industries. AI-Ops, in particular, is a fast growing I-AI area focused on internet components: Data Centers, Cloud Computing, networking, storage, etc.

The competitive environment now requires data analysis, modeling, and decision making to keep up with maximizing financial performance, improving services, and meeting product quality goals. Consequently, rapid introduction of I-AI technologies creates opportunities for startup entrants.

The goal of this class is to quickly give a broad perspective on I-AI applications. The guest lectures from leading industry players will discuss I-AI in their respective areas. The big picture views will be complemented by specific application examples and business case studies. The presenters represent industrial enterprises, technology providers, consultancies that help to set up the AI, and venture capital. As a very dynamic segment, AIOps has a special place in the class coverage.

## The lectures will include:

- 1. Introductory Lecture, Professors Dimitry Gorinevsky and Dan ONeill
- 2. AI in Industrial Enterprise, Hitachi
- 3. Data Center Analytics, Alibaba
- 4. AI and Industrial Analytics Business, Accenture
- 5. The Robotics Hub, Venture Capital
- 6. AI in Google Cloud Console, Google
- 7. AI/ML for Cloud Services, Microsoft
- 8. AI in Process Industries, Aspen Technology
- 9. Consulting in Age of Industrial AI, Deloitte