

Spring 2018 Seminar:

EE392b – Industrial Internet of Things: Applications

Time: Tuesdays, 4:30pm-5:20pm
Venue: Building 370, Main Quad (Social Sciences), Room 370
Coordinators: Dimitry Gorinevsky and Dan O’Neill, Consulting Professors
Prerequisites: Systems and/or Business Management background
Website: <http://www.stanford.edu/class/ee392b/>

Course Description

Industrial Internet of Things (IIoT) is in the center of the next industrial revolution and predicted to take over much of economy in the next decade. The industrial systems have been traditionally supported by secure Operational Technology (OT) networks that provide restricted access and carefully selected functions to critical assets. The key technological novelty of the IIoT is accumulating the data that had short lifespan in the OT networks as the Big Data in IT systems and using this data for creating new value. The convergence of the OT and IT in the IIoT calls for new value-added analytical applications.

The class goal is to present a broad perspective on applications that provide added value using the IIoT technologies. The class will feature guest lectures from leading industry players to describe and discuss how the industry is being transformed by the IIoT. The lectures will include specific application examples and case studies along with the big picture views. Most of the lectures will be presented by guest speakers from the industry. The startup and venture capital views of IIoT opportunities will be complemented by the views of enterprises operating in specific vertical markets for the IIoT. The first lecture will provide an introduction to the subject.

The lectures will include:

1. Introduction into the IIoT: Professor Dimitry Gorinevsky
2. Precision Planet: Alchemist Accelerator
3. IoT Cloud Platform: Microsoft
4. Data Revolution: Amplify Venture Partners
5. Intelligence at the Edge of the IIoT: Foghorn
6. Knowledge-based IoT Analytics: Maana
7. IoT in Smart Homes and Buildings: Honeywell
8. The Value of IoT in the Refining Industry: Andeavor
9. Digital Transformation of Aviation Industry: GE Aviation
10. Internet of Trains: Siemens