Institute for Financial Management

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Current Issues in Finance

FS 2020: Economics of Artificial Intelligence

Lectures:	No lecture. There will be one Q&A session.
Teaching assistant:	Sascha Jakob, sascha.jakob@ifm.unibe.ch
Course website:	https://www.ksl.unibe.ch
Number of ECTS credits:	2

1. Course content and objectives

The goal of this course is to develop an understanding of a current issue in finance based on readings of a book and additional articles.

This year's focus is on artificial intelligence and its impact on businesses, the economy, and society. At the center will be the book **Prediction Machines: The Simple Economics of Artificial Intelligence** by Agarwal, Gans, and Goldfarb.

"Artificial intelligence (AI) does the seemingly impossible, magically bringing machines to life – driving cars, trading stocks, and teaching children. But facing the sea change that AI will bring can be paralyzing. How should companies set strategies, governments design policies, and people plan their lives for a world so different from what we know? In the face of such uncertainty, many analysts either cower in fear or predict an impossibly sunny future.

But in *Prediction Machines*, three eminent economists recast the rise of AI as a drop in the cost of prediction. With this single, masterful stroke, they lift the curtain on the AI-is-magic hype and show how basic tools from economics provide clarity about the AI revolution and a basis for action by CEOs, managers, policy makers, investors, and entrepreneurs."

2. Course material

Book:

- *Prediction Machines: The Simple Economics of Artificial Intelligence*, by Ajay Agarwal, Joshua Gans, and Avi Goldfarb. Harvard Business Review Press.

    ➔ The book is not available on ILIAS. Students must purchase the book individually.

Articles:

- Rasekhschaffe, Keywan C. and Robert C. Jones, 2019, Machine Learning for Stock Selection, Financial Analysts Journal, Forthcoming.

- Mihet, Roxana and Thomas Philippon, 2019, The Economics of Big Data and Artificial Intelligence, in: Disruptive Innovation in Business and Finance in the Digital World, Chapter 3. Emerald Publishing Limited.

   ➔ Both articles are available on ILIAS for download.

3. Course structure

There are no weekly classes for this lecture. Students must read the book and articles individually and prepare for a 60 minutes written exam about the content of the readings. There is one Q&A session where we will meet to discuss/answer the students' questions.

4. Q&A session

Questions for the Q&A session should be sent to philip.valta@ifm.unibe.ch until April 29th, 2020. The Q&A session will be held on May 6th, 2020 from 18:15 to 19:15 in room 214 of the main building, Hochschulstrasse 4. Time and date on KSL are authoritative.

5. Exam

For this course, only one examination date will be offered. The exam will take place on May 13th, 2020 from 18:30 to 19:30 in room HG 205, Hochschulstrasse 4. The exam covers all class reading material, i.e. the book and the articles. We also expect students to be familiar with basic concepts of Finance. Students can bring along a simple calculator (non-programmable) and a two-sided A4 cheat sheet. Time and date on KSL are authoritative.