



# *AI in Finance & Business Analytics*

AFM 423



Prof. Tony S. Wirjanto

# Preface

---

**Disclaimer** Much of the information on this set of notes is transcribed directly/indirectly from the lectures of AFM 423 during Winter 2020 as well as other related resources. I do not make any warranties about the completeness, reliability and accuracy of this set of notes. Use at your own risk.

For any questions, send me an email via <https://notes.sibeliusp.com/contact/>.

You can find my notes for other courses on <https://notes.sibeliusp.com/>.

---

*Sibeliusp Peng*

# Contents

---

Preface	1
1 Intro	3
1.1 Course Website . . . . .	3
1.2 Description . . . . .	3

# Intro

---

## 1.1 Course Website

All relevant course materials reside on UW LEARN.

## 1.2 Description

Recent yrs have seen profound changes taking place across market place with market participants increasingly looking into quantitative investing techniques.

Fourth Industrial Revolution.

In this course, we provide a framework for AI-technology driven investing.

### Datasets

- generated by individuals (e.g. social media)
- business processes (e.g. commercial transactions)
- machines (e.g. satellite image data)

Issue is predication accuracy.

So-called AI enablers include

- Supervised ML/Statistical Learning (SL)
- Unsupervised
- DL

- RL

In this course

- theoretical discussion
- *RLab* sessions
- use cases on investment examples for ML/SL, DL and RL.