Wen-Kai Chung

Education

National Taiwan University (NTU)

Taiwan

Major: Bachelor of Science, Department of Mathematics

2010-2014

Double Major: Bachelor of Arts in Economics, Department of Economics

2010-2014

 \circ Overall GPA 1.8 (Taiwan 3.53/4.3)¹

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O Overall GIA 1.5 (Taiwaii 5.55/4.5)

• Presidential Awards Twice (Top 3 in semester)

• Economics GPA 1.49 (Taiwan: 3.83/4.3)² • Overall Rank 10th/83

Honors

Chien Shih-Liang Scholarship, NTU

May 2014

o I am awarded one out of two from College of Science around 3000 people.

Summer School Program Subsidy, Institute of Math, Academia Sinica

Aug 2013

• I am awarded one out of fifteen people among admitted applicants.³

Research and Working Experiences

Institute of Information Science, Academia Sinica

Taiwan

Research Assistant, Natural Language Processing and Sentiment Analysis Lab

Feb 2018-Jan 2019

- o Trained a deep neural network to identify company aliases and abbreviation names in news.
- Trained a model to predict the relationship (upstream/downstream/competitor) between two given companies by constructing multi-relation knowledge graph of words from news data (Publication [a]).
- o Supervisor: Associate Research Fellow Lun-Wei Ku, PhD

Department of Economics, NTU

Taiwan

Research Assistant, Coordination in Social Network Project

Jun 2016-Aug 2017

- o Performed literature review related to Microeconomics and Game theory.
- o Disproved some claims and gave insight when modeling a infinite repeated k-threshold game that tries to capture strong discontents from citizens through rebel information transmission of a regime.
- o Supervisor: Assistant Professor Chun-Ting Chen, PhD

Treasury Marketing Unit, Taichung Commercial Bank

Taiwan

Product Manager

Feb 2016-May 2016

- o Predicted foreign market by compiling 100 news, economic indices and 7 major currencies per day.
- o Calculated the amount of financial derivatives by Excel VBA, which improved efficiency of daily work.

Undergraduate Experiences

Institute of Mathematics, Academia Sinica

Taiwan

Teaching Assistant, Summer School Program of Mathematical Finance and Technology Jul 2014, 2016, 2017

- Proved a property of a financial derivative by using MATLAB⁴.
- o Supervisor: Associate Professor Ju-Yi Yen, PhD

Taoyuan Senior High School

Taiwan

Math Lecturer, Taiwan Regions Math League (TRML) Competition

Feb 2013-Aug 2013

• Led a group of 15 students to be ranked local top 3 in TRML competition, which contains calculus, basic algebra and probability.

Publications

[a]. Upstream, Downstream or Competitor? Detecting Company Relations for Commercial Activities, Yi-Pei Chen*, Ting-Lun Hsu*, Wen-Kai Chung*, Shih-Chieh Dai, Lun-Wei Ku, Human-Computer Interaction International Conference 2019: Business, Government and Organizations (*equal contribution)

Skills

Programming: Python (PyTorch), Linux Bash, SQL, LaTeX, C++, STATA, MATLAB, Excel VBA Languages: Mandarin Chinese (Native Fluency); English (CEFRL B2); German (CEFRL A2)

¹Taiwan GPA 3.53 is certified by my transcript. Bavarian formula is used for grade conversion.

²I calculated Economics GPA by only considering those courses with Course No. ECON, Acc and IB in my transcript.

 $^{^3}$ Please refer to section V in https://www.math.sinica.edu.tw/www/student/summer14_e.jsp

⁴Approximation of a Financial Derivative's Expected Return (PDF file): http://tinyurl.com/y99x2hqx