Heesung Lee

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INTERESTS

Atypical Business Data Mining, Natural Language Processing, Sustainable Business, ESG, Financial Engineering

EDUCATION

Kyung Hee University

Mar. 2014 ~ Present

Undergraduate Student

Seoul, Korea

Seoul. Korea

- ♦ Bachelor's Degree in Business Management, overall 3.92 / 4.00 major 3.95 / 4.00
- ♦ Expected Graduation Date: Aug. 2020

Whimoon High School

High School Diploma

Mar. 2009 ~ Feb. 2012

RESEARCH, COURSEWORK, & PUBLICATION

Kyung Hee University Center for Advanced Information Technology

Researcher (Advisor: Prof. Ohbyung Kwon)

Investigating the Impact of Corporate Social Responsibility on Firm's Short/Long-term Performance through Online Text Analytics

Spring 2015 ~ Fall 2016 Seoul. Korea

ABSTRACT (Excerpt)

Keywords related to CSR are extracted from atypical sources, such as newspapers, using text mining techniques to examine the relationship between CSR and firm performance (Lee et al., 2016).

PUBLICATION

Lee, Heesung & Jin, Yunseon & Kwon, Ohbyung. (2016). Investigating the Impact of Corporate Social Responsibility on Firm's Short- and Long-Term Performance with Online Text Analytics. Journal of Intelligence and Information Systems. 22. 13-31. 10.13088/jiis.2016.22.2.013.

Near Real-time Prediction of Cryptocurrency Price Trend Using Extended Sentiment Analysis and Deep Learning

Spring 2019 ~ Present Seoul. Korea

- The speculative characteristic of cryptocurrency requires quick and accurate forecasting of price fluctuation.
- Suggested a sentiment analysis and deep learning (GAN, weighted Leaky ReLU) mechanism using streaming text sources and minute-based currency price for accurate prediction.
- This work was launched and funded by the Ministry of Education of the Republic of Korea and the National Research Foundation of Korea (NRF-2017S1A3A2066740).
- Publication in progress.
- Service to be officially launched in 2020 in Cointelegraph Korea

Sample Paper: A Study on the Relationship between the Value of Firm and ...

- Keywords: CSiR, Firm Reputation, Tobin's Q
- Will soon be submitted and updated.

Summer 2018 ~ Present Seoul, Korea

Sample Paper: On Return Seasonality

- Replicated Keloharju, Linnainmaa, and Nyberg (2016)'s work using Korean stock return data and found strong return seasonalities as well.
- The abnormal alpha of Portfolio 5 is 1.244% per month, and it appears strongly significant with t-statistic of 4.09.

Fall 2019 ~ Present Seoul, Korea

Sample Paper: The Role and Responsibility of the Media: Investor Sentiment and IPO Stock Exchange Trends

- Researched the influence of <u>pre-IPO</u> (<u>Initial Public Offering</u>) <u>corporations</u>' news coverage on stock exchange trends in the market upon public offering.
- Researched the influence of media tone (mainly press comments) and analysis perspective on the stock exchange trends in the market.

Fall 2019 ~ Present Seoul, Korea

Pointer Network Analysis of Financial Unstructured Data and Enterprise Value

- Utilized the Pointer Network to examine and analyze the Corporate Social Responsibility of different companies. Mainly focused on analyzing unstructured data such as media reports and news articles.
- Participated in the development process of a query system by implementing the pointer network analysis

Fall 2018 ~ *Winter 2018* Seoul. Korea

Relevant University Coursework

Kyung Hee University Courses

- MGMT 1001 Business Statistics
- MGMT 1004 Business Mathematics
- MGMT 2001 Management Info Systems
- MATH 1101 Calculus I
- MATH 1102 Calculus II
- MATH 113409-21001 Linear Algebra
- MATH 2501 Probability and Statistics
- MGMT 3023 Data Analytics and Management
- MGMT 4027 Economics of Information and Strategy
- MGMT 7123 Econometrics (Graduate School Course)

Online Courses Spring 2014 ~ Present

- An Introduction to Interactive Programming in Python, Rice University
- URL: https://www.coursera.org/account/accomplishments/verify/ZPL9JEG7LK
- Pattern Discovery in Data Mining, University of Illinois-Urbana Champaign
- URL: https://www.coursera.org/account/accomplishments/verify/R2YJYNLLD4
- Machine Learning, Stanford University
- URL: https://www.coursera.org/account/accomplishments/verify/37XN2TZYD9GD
- Neural Networks and Deep Learning, deeplearning.ai
- URL: https://www.coursera.org/account/accomplishments/verify/GRSUVE62ZZ76
- Improving Deep Neural Networks: Hyperparameter tuning, Regularization, and Optimization, deeplearning.ai

Spring 2014 ~ Present Seoul, Korea

- URL: https://www.coursera.org/account/accomplishments/verify/UD6FTFJ3KHZS
- Sequence Models, deeplearning.ai
- URL: https://www.coursera.org/account/accomplishments/verify/K2QLSKD77PA8),

In-progress Courses

- Intro to Deep Learning with PyTorch, Udacity
- Deep Learning, Udacity
- Machine Learning for Trading, *Udacity*

WORK EXPERIENCE & LEADERSHIP

DeepSearch Inc. (UBERPLE)

Jul. 2018 ~ Aug. 2018

Research Intern

Seoul, Korea

- Carried out research on CSO doctorate thesis topic "Correlation between Unstructured Data in Finance and Credit Evaluation"
- Assisted the 3rd Samsung Creative Square Fair
- Participated in theme conceptualization project for Samsung Asset Management ETF (Exchange Traded Fund) in various fields such as secondary cell, mobile games, North Korea, and fried chicken industry.
- Theme extraction through deep learning (CNN) and text mining.

Ministry of Foreign Affairs

Aug. 2015 ~ Jul. 2017

Military Service

Seoul, Korea

- Worked for the Ministry of Foreign Affairs (Planning and Coordination Office, Ambassador's Office, and Ministerial Candidate Office) during military service.
- Assisted coordination of annual Ulchi-Freedom Guardian (UFG) exercise.
- Assisted confirmation hearings for minister nominee Kang Kyunghwa.

Shinhan Investment Corp.

Jul. 2015

Intern

Seoul, Korea

- Worked at the FICC department's RP division and assisted briefing sessions about daily stock exchange trends and financial issues.
- Worked at the Equity department's Financial Derivative division.

Kyung Hee University Publication Support Office

Dec. 2018 ~ Feb. 2019

Lead Research Assistant

Seoul, Korea

- Led the team of research assistants for publication of the book *IT and Business Analytics Systems in the Era of the 4th Industrial Revolution.*
- Took responsibility in gathering data about business analytics chapters.
- Acknowledged as co-author with other research assistants.

Proseed (Business Studies Club) at Kyung Hee University

Seminar Chief

Mar. 2018 ~ Dec. 2018

Seoul, Korea

- Coordinated weekly seminar plots and managed discussions during seminars.
- Planned and Conducted the official industry case study with Asan Foundation.
 - Case Study Clients:

CJ 4D-Plex

GinGliders

NHN ent.

Dable

BearBetter

Simmons

NC Soft

Kolmar Korea.

HONORS & DISTINCTIONS

Ministerial (Byeongseh Yoon) Award,

Ministry of Foreign Affairs

Dec. 2016 Seoul, Korea

For excellence in departmental duties and publication of research paper *Investigating the Impact of Corporate Social Responsibility on Firm's Short/Long-term Performance through Online Text Analytics* (Lee et al., 2016)

Ministerial Award May. 2016

Ministry of Foreign Affairs

Seoul, Korea

• For excellence in departmental duties.

Grand Prize Oct. 2019

Kyung Hee University, Education Innovation Center

Seoul, Korea

- For excellence in research paper publication
- Awarded scholarship by the amount of \$250

Academic Student Scholarship (Junior year)

Jul. 2018 Seoul. Korea

Kyung Hee University

- For excellence in thesis publication
- Award Amount: \$1,000

Superiority Scholarship (All Semesters of Enrollment)

Mar. 2014 ~ Present Seoul, Korea

Kyung Hee University

For excellence in academic performance with the highest GPA in the department of business management

• Award Amount: \$3,500 * 7 Semesters

Best Portfolio Award (Grand Prize)

Nov. 2018

Kyung Hee University

Seoul, Korea

For excellence in an academic portfolio in all Kyung Hee University departments.

TECHNICAL SKILLS

Language Skills

- Native in Korean
- Fluent in English language (Reading, Writing, Listening, Speaking)
 - IBT TOEFL
 - GRE Verbal 152

Software Handling Skills

- Python
- R
- STATA
- Bloomberg Terminal
- Thomson Reuters Eiko
- Tableau
- UCINET (Elementary)
- SAS (Elementary)
- JAVA (Elementary)

RESEARCH REFERENCES

Obyung Kwon Phone:

Professor Email: obkwon@khu.ac.kr

Kyung Hee University Web:

Ted Ahn

Chief Sales Officer (CSO)

Ph.D. Candidate in Finance

DeepSearch Inc.

Alpha Beta

Professor

(직위)

Kyung Hee University

Phone:

Email: tahn@deepsearch.com

Web:

Phone:

Email:

Web: