

# Heesung Lee

---

B-3902, 95 Hangangdae-ro, Yongsan-gu, Seoul, Republic of Korea 04378  
2014100331@khu.ac.kr, +82-1055642080

## INTERESTS

---

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

## EDUCATION

---

### Kyung Hee University

*Undergraduate Student*

*Mar. 2014 ~ Present*

*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*

*Seoul, Korea*

## 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 (LSTM) 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**

**Sample Paper: A Study on the Relationship between the Value of Firm and ...***Summer 2018 ~ Present**Seoul, Korea*

- › A study on the relationship between corporate's Tobin's Q and ...

**Sample Paper: On Return Seasonality***Fall 2019 ~ Present**Seoul, Korea*

- › 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.

**Sample Paper: The Role and Responsibility of the Media: Investor Sentiment and IPO Stock Exchange Trends***Fall 2019 ~ Present**Seoul, Korea*

- › Researched the influence of pre-IPO (Initial Public Offering) corporations' 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.

**Pointer Network Analysis of Financial Unstructured Data and Enterprise Value***Fall 2018 ~ Winter 2018**Seoul, Korea*

- › 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

**Relevant University Coursework****Kyung Hee University Courses***Spring 2014 ~ Present**Seoul, Korea*

- › 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/37XN2TZD9GD>
- › **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*
- › 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

~ Present

- › **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 3<sup>rd</sup> 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**  
*Lead Research Assistant*

*Dec. 2018 ~ Feb. 2019*  
*Seoul, Korea*

- › Led the team of research assistants for publication of the book *IT and Business Analytics Systems in the Era of the 4<sup>th</sup> 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**  
Ministry of Foreign Affairs

*May. 2016*  
*Seoul, Korea*

- › For excellence in departmental duties.

**Grand Prize**  
Kyung Hee University, Education Innovation Center

*Oct. 2019*  
*Seoul, Korea*

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

**Academic Student Scholarship (Junior year)**  
Kyung Hee University

*Jul. 2018*  
*Seoul, Korea*

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

**Superiority Scholarship (All Semesters of Enrollment)**  
Kyung Hee University

*Mar. 2014 ~ Present*  
*Seoul, Korea*

- › 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)**  
Kyung Hee University

*Nov. 2018*  
*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

Professor  
Kyung Hee University

Phone:  
Email: obkwon@khu.ac.kr  
Web:

### Ted Ahn

Chief Sales Officer (CSO)  
Ph.D. Candidate in Finance  
DeepSearch Inc.

Phone:  
Email: tahn@deepsearch.com  
Web:

### Alpha Beta

Professor  
(직위)  
Kyung Hee University

Phone:  
Email:  
Web: