Yun, Jinhyuk

Data Scientist.
NAVER Corporation.
6, Buljeong-ro, Bundang-gu
Seongnam-si, Gyeonggi-do,
Republic of Korea
Email: jinhyuk.yun@navercorp.com

Personal Information

Place and Date of Birth: Seoul, Republic of Korea, December 21,
Nationality: Republic of Korea
Language: Korean (native language), English (fluent in writing and speaking),
French (Intermediate), Japanese (Intermediate)

Education

Integrated Master's & Ph.D. Program in Physics, KAIST, Feb. 2010 – Aug. 2016

> *Proposal dissertation:* Theoretical study on a Spreading in Human Society.
> 사회에서의 전파현상에 관한 특성 연구 (Korean Title).
> *Ph. D. Supervisor:* Hawoong Jeong (http://stat.kaist.ac.kr/~hjeong/).
> Committee: Hawoong Jeong (chair), Soo Yong Kim, Juyong Park, Myung Joon Han, and Sang Hoon Lee.
> With government-sponsored scholarships.
> Date of dissertation defense evaluation: 2016. 05. 24. (passed)

Undergraduate Program in Physics, KAIST, Mar. 2005 – Jan. 2010

> Full government-sponsored scholarships.

Undergraduate Exchange Student Program, INSA Lyon, Aug. 2008 – Jul. 2009

> Génie Mécanique Conception (Mechanical Engineering)
> Government-sponsored scholarships.

Research Interests

Network Science, Data Science, Computational Social Science, Cultural Science, Economic Systems, Econo-physics, Complex network, etc.

Publications

Jinhyuk Yun, S.H. Lee, and H. Jeong, *Intellectual interchanges in the history of massive online open-editing encyclopedia, Wikipedia*, Phys. Rev. E 93, 012307 (2016).

Jinhyuk Yun, P.-J Kim, and H. Jeong, *Anatomy of scientific evolution*, PLoS ONE 10(2): e0117388 (2015).

Jinhyuk Yun, S.H. Lee, and H. Jeong, *Early adhesion of structural inequality in the formation of collaborative knowledge, Wikipedia* (ongoing).

Jinhyuk Yun, S.H. Lee, B.J. Kim, and H. Jeong, *Quantifying the risk of infectious diseases using real population traffic data* (ongoing).

In the Media

Jinhyuk Yun, P.-J Kim, and H. Jeong, *Anatomy of scientific evolution*, PLoS ONE 10(2): e0117388 (2015).

- Physics Today: "Dayside: The psychohistory of scientific evolution"

Jinhyuk Yun, S.H. Lee, and H. Jeong, *Intellectual interchanges in the history of massive online open-editing encyclopedia, Wikipedia*, Phys. Rev. E 93, 012307 (2016).

- APS Physics Focus: "Wikipedia Articles Separate into Four Categories"
- The Washington Post: "Wikipedia's social structures resemble a bureaucratic corporation, studies say"
- The Speaker: "Wikipedia Vulnerabilities Explored In New Research"
- Asian Scientist: "What The Editing History Of Wikipedia Reveals"
- Gizmodo: "Wikipedia Is Basically a Corporate Bureaucracy, According to a New Study"
- Science Alert: "Wikipedia is basically just another giant bureaucracy, study finds"
- Fudzilla: "Wikipedia has become 20th century bureaucracy"

- Weekendavisen: "Leksikalt kartel" (in Danish)
- Die Tageszeitung: "Der aussterbende männliche Schwarm" (in German)
- Der Standard.: "Wikipedia: Es droht das Ende der Schwarmintelligenz" (in German)
- Actualité Houssenia Writing: "Wikipedia, juste une énorme bureaucratie ?" (in French)
- Boa Informacão: "Como a Wikipédia se tornou uma comunidade mais fechada, e como resolver isto" (in Portuguese)
- ギズモード・ジャパン (Gizmodo Japan): "ウィキペディアは少数のスーパーエディターが支配する官僚社会" (in Japanese)
- SG: "Szomorú jövő várhat a Wikipédiára" (in Hungarian)
- Hankyoreh ScienceOn (한겨레 사이언스온): "'위키백과 15년' 문서 편집의 빅데이터 분석해보니…" (in Korean)
- Physics and High Technology (물리학과 첨단기술): "위키백과의 장기간 편집 기록 분석을 통한 위키백과 문서의 분류와 집단지성의 형성과정" (in Korean)

Awards

The 5th KIAS CAC Summer School on Parallel Computing (2014): Best project award (1st position)
The 5th BK21 Yung Physicists Workshop (2012): Presentation award (Bronze).

Presentation (selected)

International

- *Anatomy of Scientific Evolution,* The Student Conference on Complexity Science (University Of Sussex, Brighton, UK, Aug. 19-22 2014; Oral).
- *Analysis of Science and Technology Trend Based on Word Usage in Digitized Books*, APS March Meeting 2013 (Baltimore Convention Center, Baltimore, Maryland, USA, Mar. 18-22, 2013; Oral).
- *Early adhesion of structural inequality in the formation of collaborative knowledge, Wikipedia*, Data Science Challenges 2016 (Casa Cava, Matera, Italy Jul. 8-11, 2016; Oral).
- *Quantitative Analysis on the Editing History of Massive Online Open-editing Encyclopedia, Wikipedia*, STATPHYS 26 (Centre de Congres, Lyon, France Jul. 18-22, 2016; Oral).
- *Role of Experts in the Emergence of New Concepts*, STATPHYS 25 (Seoul National University, Seoul, Korea, Jul. 22-26, 2013; Poster).

- *Quantifying Wikipedia: Massive History of Online Open-Editing Encyclopedia, NetSci2016* (The K hotel, Seoul, Korea, May. 30-June. 3, 2016; Poster)

Domestic
- *Editing dynamics of Wikipedia based on real time series,* 2015 KPS Fall Meeting (HICO, Gyeongju, Gyeongsangbuk-do, 대한민국, Oct. 21-23 2015; Oral).
- *Quantitative analysis of intellectual interchanges in the history of massive online open-editing encyclopedia, Wikipedia*, The 18th statistical physics workshop (Chonbuk National University, Jeonju, Korea, August 20-22, 2015; Oral).
- *Quantitative analysis of intellectual interchanges in the history of massive online open-editing encyclopedia, Wikipedia*, 2015 KPS Spring Meeting (DCC, Daejeon, Korea, Apr. 22-24 2015; Oral).
- *Random and Ramdomness*, 2014 Workshop on Special Topics in Statistical Physics and Complex Systems (Marine Bio Research Center of Chosun University, Wando-gun, Jeollanam-do, Korea, Oct.10-11, 2014; Oral)
- *Understanding emergence of new scientific concepts in human society by the words in printed publications*, 17th Statistical Physics Workshop (Chungmu Marina Resort, Tongyeong, Korea, Oct. 31-Nov. 3, 2013)
- *Statistical Approach on Google N-gram in Search of Science and Technology Trend*, 2012 KPS Fall Meeting (Phoenix Resort, Pyeongchang, Gangwon-do, Oct. 24-26, 2012).
- *Science trend analysis via the statistics of the words In printed publications*, 2011 KPS Fall Meeting (BEXCO, Busan, Korea, Oct. 19-20, 2011; Oral)

Research Skill
Programing and data analysis: C, C++, Python, CUDA, MATLAB, etc.
Agent-based modeling and Monte Carlo simulation.
Statistical methods, Information theory, Game theory.
Analyzing tool of Complex Networks: Network X, Gephi, Cytoscape, etc.
UNIX/LINUX/Mac OS system: Installed and served as administrator of i) 400 cores netㅈork cluster, ii) 192 cores workstation, and iii) two 256GB large-memory workstations.
Automated web crawling

Short-term School

2015

12th KIAS-APCTP Winter School on Statistical Physics (Topic: Persistence and First Passage Properties in Nonequilibrium).

FOSS4G Workshop (Topic: Research with Geographical Information).

2014

11th KIAS-APCTP Winter School on Statistical Physics (Topic: Physics of Information and Information Theory).

The 5th KIAS CAC Summer School on Parallel Computing (Topic: Multiprocessor Parallel Computing and CUDA; *Project winner*).

2013

Econo-Socio Physics Society Summer School (Topic: Multi Fractal and Game Theory).

10th KIAS-APCTP Winter School on Statistical Physics (Topic: Statistical Physics for Non-Equilibrium Systems).

Game Theory and Machine Learning School 4th KIAS CAC Summer School on Parallel Computing (Topic: Multiprocessor Parallel Computing and CUDA).

Econophysics Colloquium 2013 & Asia Pacific Econophysics Conference 2013 (Topic: Quantifying Economic Phenomenon)

2012

9th KIAS-APCTP Winter School on Statistical Physics (Topic: Computational Methods in Statistical Physics).

2011

8th KIAS-APCTP Winter School on Statistical Physics (Topic: Nonequilibrium statistical physics).

MIT Social Network Analysis Workshop (Topic: Social Network Analysis).

Referee

SCI: The European Physical Journal B (EPJ B).

Conference: THE 9TH INTERNATIONAL AAAI CONFERENCE ON WEB AND SOCIAL MEDIA (ICWSM-15); THE 10TH INTERNATIONAL AAAI CONFERENCE ON WEB AND SOCIAL MEDIA (ICWSM-16).

Domestic: 새물리 (New Physics: Sae Mulli).