

# Hyunuk Kim

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ACADEMIC POSITIONS	<b>Boston University</b> , Boston, MA, USA Postdoctoral Associate, Questrom School of Business (affiliated with Institute for Health System Innovation & Policy) Advisor: Prof. Dylan Walker Aug 2019 – Current
	<b>Northwestern University</b> , Evanston, IL, USA Visiting Pre-Doctoral Fellow, Kellogg School of Management (affiliated with Northwestern Institute on Complex Systems) Advisor: Prof. Hyejin Youn Jan 2018 – Jul 2019
	<b>Santa Fe Institute</b> , Santa Fe, NM, USA Visiting Student Researcher Feb 2016 – Mar 2016
EDUCATION	<b>Pohang University of Science and Technology</b> , Pohang, Republic of Korea Ph.D. in Industrial and Management Engineering Advisor: Prof. Woo-Sung Jung Dissertation: Collective Patterns and Dynamics of Knowledge Creation Sep 2016 – Aug 2019
	M.S. in Industrial and Management Engineering Sep 2014 – Aug 2016
	B.S. in Mathematics (minor in Industrial and Management Engineering) Mar 2007 – Feb 2013
RESEARCH INTERESTS	Computational Social Science (collective learning, collaboration) Network Science (growth model, community structure) Innovation (foresight, technological change, evolutionary dynamics) Misinformation (fake news, intervention, randomized controlled trials)
PUBLICATIONS	Hyunuk Kim, Sang-Jin Ahn, and Woo-Sung Jung, “Horizon scanning in policy research database with a probabilistic topic model,” <i>Technological Forecasting &amp; Social Change</i> , vol. 146, pp. 588–594, 2019.
	Hyunuk Kim, Inho Hong, and Woo-Sung Jung, “Measuring national capability over big science’s multidisciplinary: A case study of nuclear fusion research,” <i>PLoS One</i> , vol. 14, no. 2, e0211963, 2019.
	Hyunuk Kim and Woo-Sung Jung, “Does pitch type-zone uncertainty matter to pitcher’s performance?,” <i>New Physics: Sae Mulli</i> , vol. 68, no. 6, 2018.
	Hyunuk Kim, Taekho You, Sang-Jin Ahn, and Woo-Sung Jung, “Embracing networks of national policy research in future foresight,” <i>International Journal of Knowledge-Based Development</i> , vol. 7, no. 2, pp. 107–124, 2016.
	Hyunuk Kim and Woo-Sung Jung, “Bibliometric analysis of collaboration network and the role of research station in Antarctic science,” <i>Industrial Engineering &amp; Management Systems</i> , vol. 15, no. 1, pp. 92–98, 2016.
	Hyunuk Kim, Sang-Jin Ahn, and Woo-Sung Jung, “A study on technology forecasting based on co-occurrence network of keyword in multidisciplinary journals,” <i>The Korean Operations Research and Management Science Society</i> , vol. 40, no. 4, pp. 49–63, 2015.
WORKING PAPERS	Hyunuk Kim, Daniel Kim, Young-Ho Eom, Hawoong Jeong, Woo-Sung Jung, and Hyejin Youn, “Building knowledge space from microscopic behaviors to macro structure”
	Hyunuk Kim, Marcus J. Hamilton, Woo-Sung Jung, and Hyejin Youn, “The deep structure of global mythologies and folktales”
PRESENTATIONS	Growing network model for knowledge space: micro to macro views <i>Dynamics Days 2019</i> , Evanston, USA 04 Jan 2019
	Reconstructing technology space from a secret recipe of high impact innovation <i>4th Annual International Conference on Computational Social Science</i> , Evanston, USA 15 Jul 2018

The structure of mythologies explains early human migrations out of Africa <i>4th Annual International Conference on Computational Social Science</i> , Evanston, USA	13 Jul 2018
Building technology space from microscopic dynamics to macro structure <i>Conference on Complex Systems 2017</i> , Cancun, Mexico	20 Sep 2017
The structure of mythologies explains the human expansion out of Africa <i>Conference on Complex Systems 2017</i> , Cancun, Mexico	20 Sep 2017
Measuring the impact of Tesla's open patents on electric vehicle market <i>Korean Institute of Industrial Engineers Fall Conference 2016</i> , Seoul, Republic of Korea	19 Nov 2016
Fusion of nations, fusion of disciplines: network evolution in nuclear fusion research <i>Conference on Complex Systems 2016</i> , Amsterdam, Netherlands	20 Sep 2016
Predicting future issues with keyword network of national policy research <i>SOItmC &amp; Knowledge Cities World Summit 2015</i> , Daegu, Republic of Korea	16 Jun 2015

## HONORS & AWARDS

### HONORS

Global PhD Fellow, Ministry of Education, Republic of Korea National PhD fellowship program for accepted research proposals Project: "Evolutionary dynamics of technological innovation"	Mar 2017 – Aug 2019
Creative KISTEP Fellow, KISTEP, Republic of Korea (KISTEP - Korea Institute of S&T Evaluation and Planning) Project: "Analyzing S&T knowledge structure by community detection in multislice network"	Apr 2017 – Aug 2017
Asan Young Fellow, Asan Institute for Policy Studies, Republic of Korea Education program for Philosophy, Politics, and Economics Internship at American Association for the Advancement of Science (AAAS), USA	Apr 2013 – Dec 2013

### AWARDS

Nonprofit Startup Incubator Program, Seoul NPO Center Blockchain for in-kind donation	Jun 2018 – Dec 2018
First Prize, Graduate Research Contest, Industrial and Management Engineering, POSTECH	2017
Excellence Award, The 12th Master's Student Research Contest, KIIE Fall Conference 2016 (KIIE: Korean Institute of Industrial Engineers)	2016
Encouraging Paper Award, SOItmC & Knowledge Cities World Summit 2015	2015

## EXPERIENCES

Co-Founder, Prisming: Blockchain for In-Kind Donation, Republic of Korea	2018
Participant, 14th Science Communication School, APCTP, Republic of Korea	2015
Research Intern, American Association for the Advancement of Science (AAAS), USA	2013
Military Service, Republic of Korea Marine Corps, Republic of Korea	2011 – 2012

## REFERENCES

Dr. Woo-Sung Jung, *Associate Professor*  
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Dr. Hyejin Youn, *Assistant Professor*  
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Northwestern University, Evanston, IL 60208, USA  
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Dr. Marcus J. Hamilton, *Associate Professor of Data Analytics*  
Department of Anthropology  
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