# Robin Na

MIT Sloan School of Management

robin-na.github.io

☑ robinna@mit.edu

**in** robinna

# **Research Interests**

Interpretable Machine Learning, Metascience | Knowledge Ecosystem, Dominance & Diversity

# **Education**

Massachusetts Institute of Technology	Cambridge, MA
Ph.D. Student in Information Technology, Sloan School of Management	2022 – Present
MicroMasters in Statistics and Data Science	2020
Seoul National University	Seoul, South Korea
<b>Seoul National University</b> B.S. in Physics & B.A. in Knowledge Ecology (student-designed major)	Seoul, South Korea 2021

# Research Experience

Amazon Science	Seattle, WA
Applied Scientist Ph.D. Intern in Machine Learning	2023
Carnegie Mellon University	Pittsburgh, PA
Predoctoral Researcher, Laboratory for Social Minds (PI: Simon DeDeo)	2021 - 2022
New England Complex Systems Institute	Cambridge, MA
Undergraduate Researcher (Mentors: Alexander Siegenfeld, Yaneer Bar-Yam)	2020 - 2021
Arizona State University – Santa Fe Institute Center for Complex Systems	Tempe, AZ
Undergraduate Researcher (Mentor: Bryan Daniels)	2020
Seoul National University	Seoul, South Korea
Undergraduate Researcher, Big Data Studies Lab (PI: Javier Cha)	2019
Undergraduate Researcher, Human-Centered Computing Lab (PI: Bongwon St	uh) 2019
Korea Advanced Institute of Science and Technology Da	aejeon, South Korea
Undergraduate Researcher, Complexity and Network Science Group (PI: Juyor	ng Park) 2019

Av	vards and Fellowships (Selected)	
o B	est Paper Awards	
1.	First Place, Seoul National University Presidential Award for Undergraduate Research	2021
2.	First Place, Seoul National University College of Liberal Studies Academic Research Festival	2020
3.	First Place, Seoul National University College of Liberal Studies Academic Research Festival	2019
o F	ellowships and Grants	
1.	SBS Foundation Graduate Fellowship for Future Talent (\$322,500)	2022 - 2028
2.	MIT Sloan PhD Fellowship	2022 - 2027
3.	Seoul National University Undergraduate Research Grant	2020
4.	Seoul National University Student-Designed Major Scholarship	2019 - 2021
5.	Republic of Korea Presidential Science Scholarship in Physics (full tuition + stipends)	2015 – 2021
o T	eaching and Service Awards	
	Seoul National University Volunteer Service Award for Teaching North Korean Students	2020
	Korea Defense Intelligence Commander's (Maj. Gen.) Award for Outstanding Translation	2018

### **Publications**

o Journal Articles (Peer-Reviewed)

- \*Equal Contributions
- 1. "Snakes or Ladders? Measuring the Intergenerational Performance of Chosŏn's Munkwa Exam Candidates." Robin Wooyeong Na\*, Javier Cha\*. *International Journal of Korean History*. 2021.
- Conference Proceedings (Refereed Full Paper)
  - 1. "The Diversity of Argument-Making in the Wild: from Assumptions and Definition to Causation and Anecdote in Reddit's 'Change My View.'" **Robin W. Na**, Simon DeDeo. *Proceedings of the* 44<sup>th</sup> *Annual Conference of the Cognitive Science Society*. 2022. [acceptance rate 27%, average reviewer score 4.33/5]
  - 2. "Multi-level Co-authorship Network Analysis on Interdisciplinarity: A Case Study on the Complexity Science Community." **Robin Wooyeong Na**, Bongwon Suh. *Proceedings of the* 10<sup>th</sup> *International Conference on Complex Systems* Springer, Cham. 2020.
- Manuscripts in Preparation
  - 1. "Self-similarity in Pandemic Spread and Fractal Containment Policies." Alexander F. Siegenfeld, **Robin W. Na**, Blake Elias, Yaneer Bar-Yam.

### **Conference Presentations (Selected)**

- 1. "Argument-Making in the Wild." Robin W. Na, Simon DeDeo. Cultural Evolution Society Conference. 2021.
- 2. "Higher-order Generalization of Network Density: the k-power Clique Density and its Decay Period." **Robin Wooyeong Na**, Bryan Daniels, Kenneth Aiello. *International School and Conference on Network Science*. 2020.
- 3. "Decomposing Bibliographic Networks into Multiple Complete Layers." **Robin Wooyeong Na**, Bryan Daniels, Kenneth Aiello. *International Conference on Complex Systems*. 2020.
- 4. "Early Modern Korea's Localized Yangban Assemblages in Neo4j." Javier Cha, **Robin Wooyeong Na**. *Graph Technologies in Digital Humanities*. 2020.

## **Invited Workshops**

Santa Fe Institute Complexity-GAINs Summer Institute on Intelligence & Representation
 Harvard Business School Computational Organizational Science Summer School
 2023

### **Skills**

- o Computer Languages: Python, R, SQL, MATLAB, NetLogo, UNIX Shell Scripting, LATEX, Markdown
- o Computing Environments: Git version control, Resilient Distributed Dataset, Secure Shell, Google Colab
- Fluent in English and Korean
  - 21 months of mandatory military service as an English translator at Korea Defense Intelligence Command

Last Updated: June 4, 2023