

# Minjae Kwon

✉ hbt9su@virginia.edu

## Education

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<b>University of Virginia</b> , Charlottesville, VA, USA	Aug 2022–Present
Ph.D. Candidate, Computer Science	
<b>Kyungpook National University</b> , Daegu, South Korea	Mar 2017–Aug 2022
Ph.D. Mathematics    Thesis: <i>On a generalized class of Noetherian rings</i>	
Technical Research Personnel for Military Service	Feb 2019–Feb 2022
<b>Kyungpook National University</b> , Daegu, South Korea	Mar 2011–Feb 2017
B.S. & M.S. Mathematics    Thesis: <i>The Krull Dimension of Composite Power Series Rings over Valuation Rings</i>	

## Research Experience

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<b>University of Toronto</b> , Toronto, Canada	Sep 2021–Feb 2022
Visiting Scholar (fully funded by NRF & MITACS — C\$20k)	
Research on recursive time-series augmentation.	

## Publications

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C – Conference, J – Journal, P – Preprint, \* – equal contribution

- [C2] **Minjae Kwon**, Ingy ElSayed-Aly, Lu Feng, “Adaptive Reward Design for Reinforcement Learning,” *Conference on Uncertainty in Artificial Intelligence (UAI)*, 2025.
- [C1] Amine Mohamed Aboussalah, **Minjae Kwon**, Raj G Patel, Cheng Chi, Chi-Guhn Lee, “Recursive Time Series Data Augmentation,” *International Conference on Learning Representations (ICLR)*, 2023.
- [P2] **Minjae Kwon**, Tyler Ingebrand, Ufuk Topcu, Lu Feng, “Runtime Safety through Adaptive Shielding: From Hidden Parameter Inference to Provable Guarantees,” *Preprint*, 2025.
- [P1] Dong Kyu Kim, **Minjae Kwon**, Jung Wook Lim, “On  $S$ -strong finite type rings,” *Preprint*.
- [J1] **Minjae Kwon**, Jung Wook Lim, “On Nonnil- $S$ -Noetherian Rings,” *Mathematics*, 2020.

## Grants & Awards

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• NRF (KR) & MITACS (CA) Graduate Student Travel Grant — C\$20k	2021–2022
• BK21 Plus Research Scholarship (Doctoral)	2017–2021
• BK21 Plus Outstanding Participation Award	2017
• Math Help Center, Best Tutor Award	2016
• Graduate Fellowship, Admission with Highest Distinction	2015
• The 33th Mathematics Competition for University Students in Korea, Silver Medal	2014

## Selected Talks

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1. “Some Global Dimension of Power Series Rings over  $w$ -coherent Rings.”, *Mediterranean Conf. on Pure & Applied Math*, Paris, Aug 2019.

2. “Note on  $w$ -SFT Rings.”, *Honam-Youngnam Math Societies*, Jeju, Oct 2018.
3. “The Krull Dimension of Composite Power Series Rings over Valuation Rings.”, KOOK-TAPU Joint Seminar, Osaka, Jul 2017.
4. “On Nonnil- $S$ -Noetherian Rings.”. *Joint Mathematics Meetings*, Seattle, Jan 2016.

## Teaching Assistant Experience

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### University of Virginia, USA

- CS 6763/SYS 6763 · Cyber-Physical Systems: Formal Methods, Safety & Security, 2024–2025
- CS 4710 · Artificial Intelligence, 2023, 2025

### Kyungpook National University, South Korea

- CLTR211/212 · Calculus I–II, 2015–2017, 2020
- MATH231/232 · Linear Algebra I–II, 2017–2018
- MATH235 · Number Theory, 2017–2018
- MATH292 · Set Theory & Mathematical Logic, 2017
- MATH429 · Special Topics in Geometry, 2018
- MATH413/414 · Modern Algebra I–II & Seminar, 2015–2019