

Joonhyuk Ko

Curriculum Vitae

Email: jk9737@princeton.edu
Website: www.joonhyukko.com

EDUCATION

Princeton University

Ph.D. in Computer Science
(Incoming Ph.D. student)

Princeton, NJ
Aug 2026 – May 2031

University of Virginia

B.S. in Computer Science, B.A. in Mathematics
GPA: 3.997/4.000; Highest Distinction

Charlottesville, VA
Aug 2022 – May 2026

RESEARCH EXPERIENCE

University of Virginia, Department of Computer Science

Research Assistant

Charlottesville, VA
Jan 2024 – Present

Advisor: **Dr. Ferdinando Fioretto**

- Research topics: Differential Privacy, Algorithmic Fairness
- Undergraduate Research Assistant at [RAISE](#) (Responsible AI for Science and Engineering) group.
- Led to the following publication(s): C1, P1

Carnegie Mellon University, School of Computer Science

Research Intern

Pittsburgh, PA
May 2025 – Aug 2025

Advisor: **Dr. Steven Wu**

- Research topics: Uncertainty Quantification, Learning Theory
- Summer visiting researcher in [Prof. Steven Wu's](#) group on a joint project with [Prof. Andrew Ilyas](#).
- Led to the following publication(s): C2

University of Virginia, School of Engineering and Applied Science

Research Fellow

Charlottesville, VA
May 2024 – Aug 2024

Advisor: **Dr. Ferdinando Fioretto**

- Selected as a Dean's Undergraduate Engineering Research Fellow (\$4,800 research award).
- Attended weekly professional development workshops.
- Presented a poster at the 2024 Fall Undergraduate Research Expo at UVA.

PUBLICATIONS

Conference Proceedings

C2. $(\alpha - \beta)^*$ Andrew Ilyas, **Joonhyuk Ko**, Jingwu Tang, Steven Wu, Jiahao Zhang. “*Provably Label-Efficient Conformal Prediction.*”

International Conference on Machine Learning (ICML), 2026.

C1. **Joonhyuk Ko**, Juba Ziani, Saswat Das, Matt Williams, Ferdinando Fioretto. “*Fairness Issues and Mitigations in (Differentially Private) Socio-Demographic Data Processes.*”

AAAI Conference on Artificial Intelligence (AAAI), 2025. **Oral Presentation (Top 5%).**

Preprints

P1. **Joonhyuk Ko**, Juba Ziani, Ferdinando Fioretto. “*Optimal Allocation of Privacy Budget on Hierarchical Data Release.*”

ArXiv Preprint, 2025.

*Author order is alphabetical.

AWARDS AND HONORS

- NSF Graduate Research Fellowship (NSF GRFP)** [\[link\]](#) [\[news\]](#) 2026
Five-year fellowship in STEM with three years of financial support (total award: \$159,000).
- CRA Outstanding Undergraduate Researcher Award** [\[link\]](#) [\[news\]](#) 2025, 2026
Finalist (2026), Honorable Mention (2025).
Recognizes North American undergraduates with outstanding computing research potential.
- Louis T. Rader Undergraduate Research Award** [\[link\]](#) 2025
Top Honors. The highest undergraduate CS research award at the University of Virginia (\$750 award).
- The Raven Society Member** 2025
The oldest and most prestigious honorary society at the University of Virginia.
- AAAI 2025 Student Travel Award** 2025
Received NSF-sponsored travel funding to support conference participation (\$1,800 award).
- Dean's Undergraduate Engineering Research Fellowship** 2024
Received a stipend to pursue full-time research for summer 2024 (\$4,800 award).

INVITED TALKS

- Talk:** *Fairness Issues and Mitigations in (Differentially Private) Socio-Demographic Data Processes.*
TOC4Fairness Seminar, Simons Foundation. [\[link\]](#) Mar 2025

ACADEMIC SERVICES

- Program Committee**
AAAI Conference on Artificial Intelligence (AAAI), 2026.

TEACHING EXPERIENCE

- Teaching Assistant**
APMA 6410 (Graduate-level): Engineering Mathematics I (Fall 2023)
APMA 2130: Ordinary Differential Equations (Spring 2023)

ADDITIONAL INFORMATION

- Technical Skills:** Python, C, MATLAB, L^AT_EX, SLURM, Gurobi, CVXPY, SciPy, TypeScript
Languages: English, Korean
Nationality: U.S. Citizen

REFERENCES

- Dr. Ferdinando Fioretto**
Assistant Professor, Department of Computer Science
University of Virginia
Email: fioretto@virginia.edu
- Dr. Juba Ziani**
Assistant Professor, H. Milton Stewart School of Industrial and Systems Engineering
Georgia Institute of Technology
Email: jziani3@gatech.edu
- Dr. Steven Wu**
Associate Professor, School of Computer Science
Carnegie Mellon University
Email: zstevenwu@cmu.edu