

Minhyuk Ko

PHD STUDENT · COMPUTER SCIENCE

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Education

Virginia Tech

PHD COMPUTER SCIENCE AND APPLICATIONS

- Advisor: Dr. Chris Brown

Blacksburg, VA

August 2022 - present

George Mason University

BS COMPUTER SCIENCE

- Honors College
- Undergrad research advisor: Dr. Thomas LaToza

Fairfax, VA

August 2019 - June 2022

Professional Experience

- 2023 **Graduate Peer Mentor Lead**, APIDA+ Center and the Indigenous Community Center, Virginia Tech
- 2022 **Undergraduate Research Assistant**, School of Business, George Mason University
- 2021-2022 **Web Developer and PR Assistant**, Student Centers, George Mason University
- 2021-2022 **Undergraduate Research Assistant**, Department of Computer Science, George Mason University
- 2020-2021 **STEP Mentor**, Center for Culture, Equity, and Empowerment, George Mason University

Publications

PUBLISHED

Minhyuk Ko, Dibyendu Brinto Bose, Hemayet Ahmed Chowdhury, Mohammed Seyam, Chris Brown. Exploring the Barriers and Factors that Influence Debugger Usage for Students. Symposium on Visual Languages and Human-Centric Computing. (Acceptance rate: 29%) **Best Short Paper Honorable Mention**

Jenny T. Liang, Maryam Arab, **Minhyuk Ko**, Amy Ko, Thomas LaToza. A Qualitative Study on the Implementation Design Decisions of Developers. In Proceedings of the 45th International Conference on Software Engineering, 2023. (Acceptance rate: 26% (209/796)) **Distinguished Paper Award**

POSTERS

Minhyuk Ko, Dibyendu Brinto Bose, Weilu Wang, Mohammed Seyam, Chris Brown. Understanding the Performance of Large Language Model to Generate SQL Queries. Symposium on Visual Languages and Human-Centric Computing. (Acceptance rate: 33% (21/63))

Awards, Fellowships, & Grants

AWARDS

- 2022 **Distinguished Academic Achievement Award**, Department of Computer Science, George Mason University
- 2019 - 2022 **Dean's List**, College of Engineering and Computing, George Mason University
- 2019 **AP Scholar with Distinction**, College Board

GRANTS

- 2023 **User Study Funding Program**, Virginia Tech Center for Human-Computer Interaction (CHCI) \$ 400
- 2023 - 2024 **Travel Funding**, Computer Science Graduate Council at Virginia Tech \$ 500
- 2023 **Travel Fund Program**, Graduate and Professional Student Senate of Virginia Tech (GPSS) \$ 300
- 2023 - 2024 **CHCI Travel Fund**, Virginia Tech Center for Human-Computer Interaction (CHCI) \$ 400

Presentations

INVITED TALKS

AutoPrint: An Automatic Print Statement Insertion Tool. CMD-IT/ACM Richard Tapia Celebration of Diversity in Computing Conference: Doctoral Consortium, San Diego, CA. September 18, 2024.

AutoPrint: An Automatic Print Statement Insertion Tool. Eastern Atlantic Students in Software Engineering Colloquium (ESSEC 2024), William and Mary, Williamsburg, VA. January 20th, 2024.

Exploring the Barriers and Factors that Influence Debugger Usage for Students. Society of Hispanic Professional Engineers (SHPE) 2023 National Convention: STEM Research Competition, Salt Lake City, UT. November 2nd, 2023.

Life as a Computer Science PhD Student. InspirASIAN Series: Graduate Student Experiences and Perspectives, Virginia Tech, Blacksburg, VA. March 28th, 2023.

AutoPrint: An Automatic Print Statement Insertion Tool. Center for Human-Computer Interaction (CHCI) Big Idea Workshop, Virginia Tech, Blacksburg, VA. March 17th, 2023.

Improving the Debugger Usability. Computer Science Grad Council Lightning Talks, Virginia Tech, Blacksburg, VA. October 13th, 2022.

Teaching Experience

Summer 2024 **CS 3304: Comparative Languages**, Teaching Assistant

Spring 2024 **CS 3304: Comparative Languages**, Teaching Assistant

Summer 2023 **CS 3304: Comparative Languages**, Teaching Assistant

Summer 2023 **CS 3704: Software Engineering**, Teaching Assistant

Spring 2023 **CS 3304: Comparative Languages**, Teaching Assistant

Fall 2022 **CS 3304: Comparative Languages**, Teaching Assistant

Spring 2022 **CS 310: Data Structures**, Teaching Assistant

Fall 2021 **CS 367: Computer Systems and Programming**, Teaching Assistant

Spring 2021 **CS 330: Formal Methods and Models**, Teaching Assistant

Spring 2021 **CS 262: Introduction to Low-Level Programming**, Teaching Assistant

Fall 2020 **CS 262: Introduction to Low-Level Programming**, Teaching Assistant

Spring 2020 **CS 110: Essentials of Computer Science**, Teaching Assistant

Mentoring

2023 **Omer Ahmed**, Undergraduate Student, Virginia Tech

2023 **Colin Roberts**, Undergraduate Student, Virginia Tech

Outreach & Professional Development

PROGRAM COMMITTEE

2025 **Software Analysis, Evolution and Reengineering (SANER)**, Tool Demo Track

2025 **Mining Software Repositories (MSR)**, Technical Papers - Junior Program Committee

2024 **ACM Conference on Human Factors in Computing Systems (CHI)**, Papers Track

SERVICE AND OUTREACH

2024-present **Computer Science Graduate Council at Virginia Tech**, Treasurer
2023-present **Blacksburg Toastmasters**, President (2024-2025), VP of Public Relations (2023-2024)
2023-present **Asian American Student Union**, Graduate Student Liaison
2019-present **Society of Hispanic Professional Engineers (SHPE)**, Member
2019-2022 **F1rst Gen at Mason**, Member (2019-2020), Webmaster (2020-2021), President (2021-2022)
2019-2022 **Honors College Student Advisory Board**, Freshman Representative (2019-2020), Vice Chair (2020-2021), Secretary (2021-2022)
2020 **Early Identification Program**, College Application Coach

Skills

Coding Java, C, Python, HTML, CSS, Javascript, PHP, R, Golang, \LaTeX , 80x86 assembly
Tools React, Visual Studio, IntelliJ, Firebase, JUnit, UNIX, Vim, WordPress, Eclipse SWT, Overleaf
Languages Korean (native), English (fluent), Mandarin Chinese (Intermediate)