

Jihun (Max) Joun

Assistant Professor, Digital Forensics
School of Interdisciplinary Forensics
New College of Interdisciplinary Arts & Sciences
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PERSONAL INFORMATION

Academic Appointments at ASU

- 08/2024-Present **Arizona State University**, Glendale, AZ
Assistant Professor (2024–), School of Interdisciplinary Forensics
Affiliate Faculty (2024–), School of Mathematical and Natural Sciences

Educational Background

- 02/2019-08/2023 **Korea University**, Seoul, Korea
PhD in Information Security
Dissertation: Digital Forensic Framework for Data Remnants Forensics
- 02/2017-02/2019 **Korea University**, Seoul, Korea
Master of Information Security
Thesis: Methods for Tracking the History of Document Files
- 08/2010-05/2016 **Pennsylvania State University**, University Park, PA
Bachelor of Science in Security and Risk Analysis (Cybersecurity)
Bachelor of Science in Information Sciences and Technology (Integration and Application)

Other Employment

- 03/2024-07/2024 **Sangmyung University**, Seoul, Korea
Assistant Professor, Department of Computer Science
- 08/2023-02/2024 **Korea University**, Seoul, Korea
Postdoctoral Researcher, School of Cybersecurity
- 03/2017-07/2023 **Korea University**, Seoul, Korea
Graduate Research Assistant, School of Cybersecurity

Research, Scholarly, and Professional Activities

Refereed Journal Articles

- j4 Sorin Im, Hyunah Park, **Jihun Joun**, Sangjin Lee, Jungheum Park. “Revisiting logical image formats for future digital forensics: A comprehensive analysis on L01 and AFF4-L.” *Forensic Science International: Digital Investigation* 50. (2024): 301811.
- j3 **Jihun Joun**, Sangjin Lee, Jungheum Park. “Data remnants analysis of document files in Windows: Microsoft 365 as a case study.” *Forensic Science International: Digital Investigation* 46. (2023): 301612.
- j2 **Jihun Joun**, Sangjin Lee, and Jungheum Park. “Discovering spoliation of evidence through identifying traces on deleted files in macOS.” *Forensic Science International: Digital Investigation* 44 (2023): 301502.
- j1 **Jihun Joun**, Hyunji Chung, Sangjin Lee, Jungheum Park. “Relevance analysis using revision identifier in MS word.” *Journal of Forensic Sciences* 66.1 (2021): 323-335.

Sponsored Research Projects (Senior Researcher)

- rp12 Korea University, *Foundational Research on Core Technologies for Advancing Digital Evidence Analysis and Management Systems*, 2023-2024
- rp11 Korea Institute of Science and Technology Information. *Research on elementary technologies for solving social issues based on sound data*, 2023
- rp10 The Korean National Police Agency. *Research on Data Acquisition and Analysis for Counter Anti-Forensics*, 2022-2023
- rp9 Korea University, *Preliminary Study on Building a Digital Forensics Infrastructure for Cybercrime Response in IoT Environments*, 2021-2022
- rp8 National Security Research Institute. *Research on Construction Model for Big Data-Based Incident Response Analysis*, 2021
- rp7 The Korean National Police Agency. *Research on Construction System for Digital Forensic Tools Verification*, 2021
- rp6 Korea Institute of Marine Science & Technology Promotion. *Development of Digital Forensic Technique for Navigational Equipment*, 2019-2020
- rp5 Institute of Information & Communications Technology Planning & Evaluation (IITP). *Development of Digital Forensic Integrated Platform – CARPE Forensics*, 2018-2020
- rp4 The Korean National Police Agency. *Development of Damaged Document File Recovery Module*, 2018
- rp3 Hanwha Systems Co., Ltd. *Research on Mock Attack Cybersecurity Training Technology*, 2018
- rp2 National Security Research Institute. *Research on Validation of Digital Forensic Tools*, 2017
- rp1 Supreme Public Prosecutors' Office Republic of Korea. *Research on Assessment Methods for Digital Forensic Tools*, 2017

Software and Applications

- sw3 *FICA*, File Carving & Analyzer. C-2020-031145 (KOR)
- sw2 *DEFA*, Document file analyzer. C-2019-035736 (KOR)
- sw1 *CARPE Forensics*, An integrated digital forensic platform. C-2019-035737 (KOR). <https://github.com/dfrc-korea/carpe>

AWARDS

- aw3 Jihun Joun, NCUIRE Award, Arizona State University, 2025, \$1,250
- aw2 Jihun Joun, *BK21 Graduate Fellowship*, National Research Fund of Korea (NRF), 2022, \$2,500
- aw1 Jihun Joun, *BK21 Graduate Fellowship*, National Research Fund of Korea (NRF), 2021, \$5,000

TEACHING AND EDUCATION ACTIVITIES

- Arizona State University**, Glendale, AZ (Instructor)
- as5 ACO 499: Individualized Instruction (enrollment 2)
- as4 FOR 350: Computer Forensics, Fall 2025 (enrollment 100)
- as3 Redesigned ACO 331: Network Forensic Analysis, Spring 2025 (enrollment 14)
- as2 FOR 350: Computer Forensics, Spring 2025 (enrollment 72)
- as1 Redesigned FOR 350: Computer Forensics, Fall 2024 (enrollment 55)

- Sangmyung University**, Seoul, Korea (Instructor)
- su2 HAEA9237: Computer Mathematics – Calculus, Spring 2024 (enrollment 110)
- su1 HAEA9241: Data Structure, Spring 2024 (enrollment 90)

Other Institutions

- oi3 Digital Forensics, Spring 2023 (enrollment 50), Seoul Cyber University, Seoul, Korea
- oi2 PAS4026: Digital Forensics Practice, Fall 2022 (enrollment 25), Dongguk University, Seoul, Korea
- oi1 IMS666: Introduction to Digital Forensics, Spring 2022 (enrollment 25), Korea University, Seoul, Korea

SERVICES

Academic Services

- as6 2025 Program Lead, Digital Forensics BS Program
- as5 2025 Mentor, Train
- as4 2025 Mentor for Undergraduate Research (Barrett Honors College)
- as3 2024 Search Committee Member, School of Interdisciplinary Forensics
- as2 2024 Faculty Advisor, Digital Forensics and Innovation Lab (DFIL)
- as1 2024 Assessment Coordinator, Computational (Digital) Forensics Program

Professional Services

- ps7 2025 Technical Program Committee Member, Digital Forensics Research Conference (DFRWS APAC '25)
- ps6 2025 Thesis Committee Member, Sungkyunkwan University, Korea
- ps5 2025 Peer-reviewer, NRF, Korea
- ps4 2025 Workshops Co-Chair, Digital Forensics Research Conference (DFRWS APAC '25)
- ps3 2025 Associate Member, The American Academy of Forensic Sciences (AAFS)
- ps2 2024 Thesis Committee Member, Sungkyunkwan University, Korea
- ps1 2024 Workshops Co-Chair, Digital Forensics Research Conference (DFRWS APAC '24)

Community Services

- cs3 2025 Presenter, Behind Crime Scene Investigation
- cs2 2025 Chair, Digital Forensics Challenge, Open Door 2025
- cs1 2025 Media Contributor, Fox10 News