Kyung Myung Ko
[US Permanent Resident]

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EDUCATION

University of Washington   Sep 2025 - Jun 2027
Master of Science in Electrical and Computer Engineering

Purdue University   Expected May 2025
Bachelor of Science in Computer Science and Artificial Intelligence
- Computer Vision with Deep Learning, Natural Language Processing, Signals and Systems, Security Analytics, Intro to Robotics, Data Mining & Machine Learning, Statistical Methods

EXPERIENCE

Research Intern, *National Institute of Astrophysics, Optics and Electronics, Mexico*   Jun 2024 - Aug 2024
Advisor: Dr. Thamar Solorio, Dr. Manuel Montes-y-Gómez
- Developed a speech and text cross-modal interaction module for classification, utilizing openSMILE and SONAR.
- Replicated and evaluated the baseline work on the multiligual & multimodal hate speech detection task.
- Attended NAACL 2024 conference, engaged in oral, poster, and workshop sessions.

Research Assistant, *Purdue University, West Lafayette IN*   May 2023 - Oct 2023
Advisor: Dr. James Davis
- Developed scripts to aggregate PGP signatures on Maven Central repository and analyzed their qualities.
- Contributed to the experimental design section of paper, published to IEEE S&P'24.

Data Processing Manager, *Republic of Korea Army, South Korea*   Sep 2021 - Mar 2023
- Operated and ensured the security of the transmitted data from the Army Tactical Command Information System.
- Tracked IP addresses of operational machines and compiled weekly reports of their privacy status.
- Managed networked surveillance cameras to ensure reliable streaming 24/7.

Research Intern, *Northwestern University, Evanston IL*   Jun 2021 - Aug 2021
Advisor: Dr. Marcelo Worsley
- Designed and collected EEG dataset, extracted features to train classification models via GRU, KNN, XGBoost.
- Converted real-time EEG data to player movement in the video game Minecraft, submitted to EAAI-24.

Caterpillar Corporate Partner Researcher, *Purdue University, West Lafayette IN*   Aug 2020 - May 2021
Advisor: Sridhar Ramaswamy
- Replicated a vanilla GAN model and fine-tuned it to perform regression on the multivariate time series data.
- Applied adversarial training algorithm, evaluated the performance with L1 & L2 loss, and presented a poster.

PUBLICATION/PREPRINT

* Signing in Four Public Software Package Registries: Quantity, Quality, and Influencing Factors

Taylor R Schorlemmer, Kelechi G Kalu, Luke Chigges, **Kyung Myung Ko**, Eman Abdul-Muhd Abu Isghair, Saurabh Baghi, Santiago Torres-Arias, James C Davis

Proceedings of the 45th IEEE Symposium on Security and Privacy (S&P) 2024.

* Increasing Accessibility for Game-based Learning Experiences: Developing Brain Computer Interface Controls for Minecraft

Andy Ko, Vishesh Kumar, Marcelo Worsley

Preprint 2024.

TEACHING ASSISTANT & SERVICES

Teaching	*Data Structures And Algorithms For DS/AI* **SP25**, Purdue University
	Problem Solving And Object-Oriented Programming **SP25, SP24, FA23**, Purdue University
Service	*Purdue Korean Association Recruiting Manager* **2023-2024**, Purdue University
	Data Processing Manager **2021-2023**, Republic of Korea Army
	Hello World Hackathon Mentor **2020**, Purdue University
	Volunteer Assistant Teacher **2015-2016**, Korean Culture & Language School of Oklahoma

HONORS/AWARDS & SKILLS

Honors	*CS Department Outstanding Student in AI* **2024**, Purdue University
	Dean's List **2019, 2020, 2021, 2023, 2024**, Purdue University
	Excellence in the Annual Headquarters Security Audit **2022**, Republic of Korea Army
	Academic Excellence in Telecommunications Military Training School **2021**, Republic of Korea Army
	Austin Coding Academy Scholarship **2018**, Austin Coding Academy
	Asia Society of Oklahoma Scholarship **2016**, Asia Society of Oklahoma
	Excellence in Junior Leadership Award **2016**, The National Association for Korean Schools
Skills	Python, Java, Bash, C, C#, JavaScript, HTML/CSS