KUN WOO CHO

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EDUCATION

Princeton University   Princeton, NJ
Doctor of Philosophy (Ph.D.) in Computer Science   Expected 2024
Master of Art (M.A.) in Computer Science   2020
Advisor: Kyle Jamieson

University at Buffalo, SUNY   Buffalo, NY
Bachelor of Science (B.S.) in Computer Science and Engineering with distinction   2018
Advisor: Wenyao Xu

University of Cambridge   Cambridge, UK
Visiting Student   2017
Advisor: Cecilia Mascolo

PROFESSIONAL EXPERIENCE

Princeton University, Ph.D. Student Researcher - PAWS Lab, Princeton, NJ   Aug. 2018 - present

Facebook, Ph.D. Research Intern - Facebook Connectivity Lab, Menlo Park, CA   May 2021 - Aug. 2021

University of Cambridge, Undergraduate Intern - NetOS Lab, Cambridge, UK   June 2017 - Aug. 2017

University at Buffalo, Undergraduate Intern - ESC Lab, Buffalo, NY   July 2015 - May 2018

REFERRED PUBLICATIONS

C1. **Kun Woo Cho**, Mohammad H. Mazaheri, Jeremey Gummeson, Omid Abari, Kyle Jamieson, "mmWall: A Transflective Metamaterial Surface for mmWave Networks," In **USENIX NSDI '23**, Acceptance rate: 15.9% (fall round).

- An earlier version appeared in **ACM HotMobile '21**

C2. **Kun Woo Cho**, Marco Cominelli, Francesco Gringoli, Joerg Widmer, Kyle Jamieson, "Scalable Multi-modal Learning for Cross-Link Channel Prediction in Massive IoT Networks," In **ACM MobiHoc '23**, Acceptance rate: 21.9%. ****Best Paper Award****

- An extended journal version submitted to **IEEE/ACM ToN '24**

C3. **Kun Woo Cho**, Srikar Kasi, Kyle Jamieson, "A Low-Power OAM Metasurface for Rank-Deficient Wireless Environments," In **IEEE GLOBECOM '23**.

C4. **Kun Woo Cho**, Yasaman Ghasempour, Kyle Jamieson, "Towards Dual-Band Reconfigurable Metasurfaces for Satellite Networking," In **ACM SIGCOMM HotNets '22**, Acceptance rate: 30%.

C5. Feng Lin, **Kun Woo Cho**, Chen Song, Wenyao Xu, Zhanpeng Jin, "Brain Password: A Secure and Truly Cancelable Brain Biometrics for Smart Headwear," In **ACM MobiSys '18**, Acceptance rate: 18.1%.

- An extended journal version appeared in **IEEE TMC '19**

Under Review:

C6. **Kun Woo Cho**, Prasanthi Maddala, Ivan Seskar, Kyle Jamieson, "Software Hardware Co-Design for Reliable Handover." [in preparation]

C7. Fan Yi, **Kun Woo Cho**, Yaxiong Xie, Kyle Jamieson, "WaveFlex: A Smart Surface for Private CBRS Wireless Cellular Networks." [arxived]

HONORS AND AWARDS

Princeton SEAS Award for Excellence (4/250), Princeton University	2023
Best Paper Award (1/136), ACM MobiHoc	2023
Princeton Graduate Student Fellowship, Princeton University	2018
Dean's Undergraduate Achievement Award (4/1000+), University at Buffalo	2018
CSE Departmental Award of Research (2/300+), University at Buffalo	2018
Undergraduate Research Award of Distinction, University at Buffalo	2017
Grace Hopper Celebration (GHC) Scholarship, Apple	2017
Honors College Program & Honors College Scholarship, University at Buffalo	2014-2018
International Merit Scholarship & Davis Dean's Scholarship, University at Buffalo	2014-2018
Dean's List (all semesters), University at Buffalo	2014-2018
Travel Grant Awards: NSDI '23, IEEE ComSoc '23, HotNets '23, Princeton SEAS Travel Award	

MEDIA COVERAGES

"**Celebrating women's history month with stories of resilience and reinvention**", Princeton News	2024
"**Award for Excellence honors graduate student achievement**", Princeton News	2023
"**Surface steers signals for next-gen networks**", Princeton News, Tech Xplore	2023
"**Ten SEAS students recognized for outstanding research**", UB News	2018
"**Smartphone app for early autism detection developed by UB undergrad**", UB News, UPI, Wired	2016

PATENT

US Patent Application 17/710,772 filed Oct. 13, 2022. Reconfigurable Metamaterial Surface for mmWave Networks. Kun Woo Cho, Mohammad H. Mazaheri, Jeremey Gummeson, Omid Abari, Kyle Jamieson.

Provisional US Patent Application 63/356,797 filed June 29, 2022. Dual-band Reconfigurable Metamaterial Surfaces for Satellite Networking. Kyle Jamieson, Kun Woo Cho, Yasaman Ghasempour.

INVITED TALKS

Korea University   Sept. 2023
"Steerable and Transflective Metamaterial Surfaces for Wireless Communication", host: Prof. Donghun Lee

Kyungpook National University   Oct. 2023
"Multi-Modal Representation Learning for Wireless Communication", host: Prof. Jeeyoung Kim

SERVICE

Artifact Evaluation Committee, ACM MobiCom '24
Reviewer, ACM IMWUT/UbiComp '20
Reviewer, ACM HEALTH '19

SKILLS

Programming Languages:	C, C++, Python, MATLAB, Java, JavaScript, SQL, ARM, MIPS
Circuit Design and Simulations:	HFSS, CST, ADS, Altium Designer, Multisim, Verilog, LabView
Network Simulator and Emulators:	NS3, srsRAN
Experiments:	VNA, Spectrum Analyzer, USRP
Others:	TensorFlow, Torch, Android Studio, Git, LaTeX, EEGLAB