

# HUN NAMKUNG

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## INTERESTS

Data Center Networking, Network Monitoring/Telemetry, Programmable Network Devices.

## EDUCATION

<b>Carnegie Mellon University (CMU), Pittsburgh, PA.</b> Ph.D. student, Electrical and Computer Engineering Department Advisor: Peter Steenkiste and Vyas Sekar Thesis: Enabling Practical and Performant Sketch-based Network Telemetry on Programmable Switches	SEP '16 - AUG '17, JAN '19 - PRESENT
<b>Olin College of Engineering, Needham, MA.</b> Exchange Student	FEB '10 - MAY '10
<b>Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea.</b> B.S. in Computer Science	FEB '08 - JUN '16

## PUBLICATION

<b>SEAM-EZ: Simplifying Stateful Analytics through Visual Programming (to appear)</b> Zhengyan Yu, <u>Hun Namkung</u> , Jiang Guo, Henry Milner, Joel Goldfoot, Yang Wang, Vyas Sekar In Proceedings of the ACM Conference on Human Factors in Computer Systems (CHI) 2024	CHI '24
<b>Sketchovsky: Enabling Ensembles of Sketches on Programmable Switches</b> <u>Hun Namkung</u> , Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste In 20th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2023	NSDI '23
<b>SketchLib: Enabling Efficient Sketch-based Monitoring on Programmable Switches</b> <u>Hun Namkung</u> , Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste In 19th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2022	NSDI'22
<b>Telemetry Retrieval Inaccuracy in Programmable Switches: Analysis and Recommendations</b> <u>Hun Namkung</u> , Daehyeok Kim, Zaoxing Liu, Vyas Sekar, Peter Steenkiste In Proceedings of the Symposium on SDN Research (SOSR) 2021, published as short paper	SOSR'21
<b>Jaquen: A high-performance switch-native approach for detecting and mitigating volumetric ddos attacks with programmable switches</b> Zaoxing Liu, <u>Hun Namkung</u> , Georgios Nikolaidis, Jeongkeun Lee, Changhoon Kim, Xin Jin, Vladimir Braverman, Minlan Yu, and Vyas Sekar In 30th USENIX Security Symposium (USENIX Security) 2021	SECURITY'21
<b>Sketchy With a Chance of Adoption: Can Sketch-Based Telemetry Be Ready for Prime Time?</b> Zaoxing Liu, <u>Hun Namkung</u> , Anup Agarwal, Antonis Manousis, Peter Steenkiste, Srinivasan Seshan, and Vyas Sekar In 2021 IEEE 7th International Conference on Network Softwarization (NetSoft) 2021	TAPoPF'21
<b>Enabling Automatic Protocol Behavior Analysis for Android Applications</b> Jeongmin Kim, Hyunwoo Choi, <u>Hun Namkung</u> , Woohyun Choi, Byungkwon Choi, Hyunwook Hong, Yongdae Kim, Jonghyup Lee, and Dongsu Han In Proceedings of the 12th International Conference on emerging Networking EXperiments and Technologies (CoNEXT) 2016	CoNEXT'16

## PROFESSIONAL EXPERIENCE

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<b>Conviva, Foster City, CA.</b> <i>Senior Software Engineer</i> – Design and build user interface for Conviva’s novel <a href="#">timeline backend engine</a> .	MAR ’23 - PRESENT
<b>Line Finance, South Korea.</b> <i>Software Engineer</i> – Build data pipeline for stock trading infrastructure system augmented by machine learning techniques.	OCT ’17 - OCT ’18
<b>Frankly Co, San Francisco, CA.</b> <i>Software Engineer</i> – I was developing an iOS application. Frankly was a start up company that developed a mobile instant messenger with ephemeral messages.	APR ’13 - AUG ’14
<b>U.S. Army, Camp Casey, South Korea.</b> – As a member of KATUSA (Korean Augmentation To the United States Army) Program	JUN ’11 - MAR ’13

## TEACHING EXPERIENCE

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<b>Teaching Assistant</b> , Computer Networks (18-441) at CMU	SPRING ’22
<b>Teaching Assistant</b> , Network Security (18-731) at CMU	SPRING ’20
<b>Teaching Assistant</b> , Introduction To Programming (CS101) at KAIST	SPRING ’15

## HONOR AND AWARDS

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<b>Dean’s List for Academic Excellence</b>	DEC ’14
<b>KAIST Academic Excellence Scholarship</b> Top 4 students in computer science department	DEC ’14
<b>12th place in 2010 ICPC Korea National Programming Contest</b>	OCT ’10
<b>10th place in 2009 ICPC Korea National Programming Contest</b>	OCT ’09
<b>Full Scholarship from KAIST (4 year)</b>	FEB ’08
<b>Korea Olympiad in Informatics - Bronze</b>	AUG ’06
<b>Seoul regional contest of Korea Olympiad in Informatics - Gold</b>	JUN ’06