

HUN NAMKUNG

Web: <https://hnamkung.github.io>
Email: hnamkung15@gmail.com
[LinkedIn](#) / [Google Scholar](#)

INTERESTS

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

EDUCATION

Carnegie Mellon University (CMU), Pittsburgh, PA. SEP '16 - AUG '17,
Ph.D. in Electrical and Computer Engineering Department JAN '19 - JAN '23
Advisor: Peter Steenkiste and Vyas Sekar
Thesis: Enabling Practical and Performant Sketch-based Network Telemetry on Programmable Switches

Olin College of Engineering, Needham, MA. FEB '10 - MAY '10
Exchange Student

Korea Advanced Institute of Science and Technology (KAIST), Daejeon, South Korea. FEB '08 - JUN '16
B.S. in Computer Science

PUBLICATION

SEAM-EZ: Simplifying Stateful Analytics through Visual Programming (to appear) CHI '24
Zhengyan Yu, [Hun Namkung](#), Jiang Guo, Henry Milner, Joel Goldfoot, Yang Wang, Vyas Sekar
In Proceedings of the ACM Conference on Human Factors in Computer Systems (CHI) 2024

Sketchovsky: Enabling Ensembles of Sketches on Programmable Switches NSDI '23
[Hun Namkung](#), Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste
In 20th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2023

SketchLib: Enabling Efficient Sketch-based Monitoring on Programmable Switches NSDI'22
[Hun Namkung](#), Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste
In 19th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2022

Telemetry Retrieval Inaccuracy in Programmable Switches: Analysis and Recommendations SOSR'21
[Hun Namkung](#), Daehyeok Kim, Zaoxing Liu, Vyas Sekar, Peter Steenkiste
In Proceedings of the Symposium on SDN Research (SOSR) 2021, published as short paper

Jaqen: A high-performance switch-native approach for detecting and mitigating volumetric ddos attacks with programmable switches SECURITY'21
Zaoxing Liu, [Hun Namkung](#), Georgios Nikolaidis, Jeongkeun Lee, Changhoon Kim, Xin Jin, Vladimir Braverman, Minlan Yu, and Vyas Sekar
In 30th USENIX Security Symposium (USENIX Security) 2021

Sketchy With a Chance of Adoption: Can Sketch-Based Telemetry Be Ready for Prime Time? TAPoP'21
Zaoxing Liu, [Hun Namkung](#), Anup Agarwal, Antonis Manousis, Peter Steenkiste, Srinivasan Seshan, and Vyas Sekar
In 2021 IEEE 7th International Conference on Network Softwarization (NetSoft) 2021

Enabling Automatic Protocol Behavior Analysis for Android Applications CoNEXT'16
Jeongmin Kim, Hyunwoo Choi, [Hun Namkung](#), 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

PROFESSIONAL EXPERIENCE

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

TEACHING EXPERIENCE

- Teaching Assistant**, Computer Networks (18-441) at CMU SPRING '22
Teaching Assistant, Network Security (18-731) at CMU SPRING '20
Teaching Assistant, Introduction To Programming (CS101) at KAIST SPRING '15

HONOR AND AWARDS

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