HUN NAMKUNG

Web: https://hnamkung.github.io Email: hnamkung15@gmail.com LinkedIn: link

RESEARCH INTEREST

Data Center Networking, Network Telemetry, Programmable Network Devices.

EDUCATION

Carnegie Mellon University (CMU), Pittsburgh, PA.

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

Olin College of Engineering, Needham, MA.

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) 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	CHI '24
Sketchovsky: Enabling Ensembles of Sketches on Programmable Switches Hun Namkung, Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste In 20th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2023	NSDI '23
SketchLib: Enabling Efficient Sketch-based Monitoring on Programmable Switches Hun Namkung, Zaoxing Liu, Daehyeok Kim, Vyas Sekar, Peter Steenkiste In 19th USENIX Symposium on Networked Systems Design and Implementation (NSDI) 2022	NSDI'22
Telemetry Retrieval Inaccuracy in Programmable Switches: Analysis and Recommendations Hun Namkung, Daehyeok Kim, Zaoxing Liu, Vyas Sekar, Peter Steenkiste In Proceedings of the Symposium on SDN Research (SOSR) 2021, published as short paper	SOSR'21
Jagen: A high-performance switch-native approach for detecting and mitigating volumetric	SECUDITY'21

Jaqen: A high-performance switch-native approach for detecting and mitigating volumetric Security'21 ddos attacks with programmable switches

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? Zaoxing Liu, Hun Namkung, Anup Agarwal, Antonis Manousis, Peter Steenkiste, Srinivasan Seshan, and Vyas Sekar TAPOPF'21

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, <u>Hun Namkung</u>, Woohyun Choi, Byungkwon Choi, Hyunwook Hong, Yongdae Kim, Jonghyup Lee, and <u>Dongsu Han</u>

In Proceedings of the 12th International on 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.

Ост '17 - Ост '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

Jun '06

- As a member of KATUSA (Korean Augmentation To the United States Army) Program

Seoul regional contest of Korea Olympiad in Informatics - Gold

TEACHING EXPERIENCE

Teaching Assistant, Computer Networks (18-441) at CMU	Spring '22 Spring '20	
Teaching Assistant, Network Security (18-731) at CMU		
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	Ост '10	
10th place in 2009 ICPC Korea National Programming Contest	Ост '09	
Full Scholarship from KAIST (4 year)	Feb '08	
Korea Olympiad in Informatics - Bronze	Aug '06	