KEDAR THIAGARAJAN

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EDUCATION

Northwestern University, Evanston, IL **09/2022 - Present**
PhD Student in Computer Science
Advised by Fabian Bustamante
Research in the intersection of internet measurement, security, resilience, and machine learning
University of California, Los Angeles, Los Angeles, CA **09/2015 - 06/2019**
B.S. in Computer Science
Class of 2019

EXPERIENCE

Northwestern University **09/2022 - Present**
Ph.D Candidate

- Conducting research in internet measurement, security, resilience, and machine learning.
- Work accepted at CoNEXT '25

VMWare/Broadcom **07/2020 - 09/2022**
Senior Member of Technical Staff, Palo Alto, CA

- Scaled the total number of supported virtual machine workloads from thousands to hundreds of thousands for recovery management.
- Developed a RESTful configuration management tool for virtual machines in a highly scalable environment.

Datrium (Acquired by VMware) **04/2019-07/2020**
Member of Technical Staff, Sunnyvale, CA

- Developed new features to support data aggregation and vSphere integration for the Control Shift disaster recovery product.
- Developed snapshot tools to aggregate data about VM workloads and manage snapshot versions.

Facebook **06/2018 - 08/2018**
Software Engineer Intern, Menlo Park, CA

- Created a logging system to monitor performance data on requests generated by over 1 billion Instagram users.
- Integrated an A/B testing framework for auto-scaling and performance insights.

PUBLICATIONS

CoNEXT 2025 (Accepted)
The Aleph: Decoding DNS PTR Records With Large Language Models
Kedar Thiagarajan, Esteban Carisimo, Fabian Bustamante
A system leveraging LLMs to generate re-usable regular expressions and hint mappings to extract geographic hints from DNS PTR records. Our website
(In Submission - Review and Resubmit for 2025)

IMC 2025 (In Submission)
Harnessing The Force: Insights into NVIDIA's GFN Confederation
Kedar Thiagarajan, Esteban Carisimo, Fabian Bustamante
A novel study examining NVIDIA GFN's service tiers and confederate network architecture encompassing core and partner networks for delivering cloud gaming services.

IMC 2025 (In Submission)
Towards Transparency in DNS Resolver Hierarchies
We propose anextension to the DNS protocol to move towards more transparency motivated by a measurement study of the OpenDNSresolver topology.
Kedar Thiagarajan, Rashna Kumar, Fabian Bustamante

ACM SIGCOMM 2024 (Published)
Poster: *Revealing Hidden Secrets: Decoding DNS PTR Records with Large Language Models*
Kedar Thiagarajan, Esteban Carisimo, Fabian Bustamante

ACM SIGCOMM 2023 (Published)
Poster: *A Peek Backstage: Organizations in DNS Resolver Hierarchies*
Kedar Thiagarajan, Rashna Kumar, Fabian Bustamante

TECHNICAL STRENGTHS

Programming Languages: C++, C, Java, Golang, Python, Assembly, JavaScript
Operating Systems: Linux, Mac OS, Windows
Skills: Computer Networks, Artificial Intelligence, Deep Learning, Virtual Machines
Tools: AWS, Azure, IBM Cloud, GCP, PostgreSQL, VMware, vSphere, IBM Watson

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RELEVANT COURSEWORK

CS345 - Distributed Systems, CS449 - Deep Learning, CS440 - Advanced Networks
CS445 - Internet Scale Experimentation, CS450 - Internet Security
CS446 - Low Level Software Development, CS460 - The Intersection of Law and Digital Technologies
DATASCI401 - Data Driven Research, DATASCI421 - Integrated Data Analytics