

Sepehr Abdous

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📁 sepehrabdous.github.io

Education

Johns Hopkins University

PhD

School of Computer Science

Baltimore

2019-Present

Johns Hopkins University

M.Eng, GPA: 3.81/4

School of Computer Science

Baltimore

2019-2023

Sharif University of Technology

BSc, GPA: 17.06/20

School of Computer Engineering

Tehran

2014 - 2019

Area of research

My main field of research focuses on ways of measuring and resolving transient congestion events, known as **bursts**, in large datacenters. Currently, I am probing packet deflection, *i.e.*, re-routing the packets forwarded to a congested port instead of dropping them, as a potential solution to burstiness.

Work Experience

Microsoft

Consulting researcher

As a consulting researcher, I work with Dr. Kabbani and Dr. Ghalayini to design and deploy fast and scalable networking protocols.

2024

Baltimore, USA

CCC Intelligent Solutions Company

Intern

I designed and implemented a technique to increase the speed of data migrations between the company's remote storage servers.

2022

Chicago, USA

HPDS(High Performance Data Storage) Company

Intern

Responsible for automating the system update process and conducting system FIO tests.

2018

Tehran, Iran

Darmaneh Company

Android and IOS Developer

Darmaneh was a startup company which focused on creating a platform for online medical visits. I was responsible for developing the Android and IOS application.

2016-2018

Tehran, Iran

Skills

- **Technical Skills:** Datacenter networking, Network simulation and hardware implementation
- **Programming Languages:** C, C++, Python, Java, P4
- **Tools:** Omnet++, Git, Latex, Ansible

Publications

Papers.....

- Tempus: Probabilistic Network Latency Verification** 2024
*Sepehr Abdous**, Senapati Diwangkara*, Soudeh Ghorbani (*Equal contribution)
IEEE Access
- Practical Packet Deflection in Datacenters** 2023
Sepehr Abdous, Erfan Sharafzadeh, Soudeh Ghorbani
CoNEXT 2023
- Understanding the impact of the host networking elements on traffic bursts** 2023
Erfan Sharafzadeh, *Sepehr Abdous*, Soudeh Ghorbani
NSDI 2023
- Burst-tolerant Datacenter Networks with Vertigo** 2021
*Sepehr Abdous**, Erfan Sharafzadeh*, Soudeh Ghorbani (*Equal contribution)
CoNEXT 2021
- Stock price forecasting using machine learning with event detection on candlestick** 2018
Salman Marvasti, *Sepehr Abdous*, Negin Majidi
File available in Researchgate

Posters.....

- Implementable selective deflection with Canary** 2023
Sepehr Abdous, Erfan Sharafzadeh, Soudeh Ghorbani
NSDI 2023
- Vertigo: A Priority-aware Burst-tolerant Datacenter Fabric** 2021
Sepehr Abdous, Erfan Sharafzadeh, Sougol Gheissi, Soudeh Ghorbani
16'th Coordinated Science Laboratory Student Conference (CSLSC)
- Valinor: Transport-Agnostic Packet Prioritization and Ordering at the Edge** 2021
Erfan Sharafzadeh, *Sepehr Abdous*, Sougol Gheissi, Soudeh Ghorbani
16'th Coordinated Science Laboratory Student Conference (CSLSC)

Professional Service

- Journal Reviewer for Computer Networks (2022-2024)

- Journal Reviewer for Journal of Network and Computer Applications (2022-2024)
- Journal Reviewer for Ad Hoc Networks (2022-2023)