

Sepehr Abdous

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Education

Johns Hopkins University
PhD

School of Computer Science

Baltimore
2019-Present

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 microsecond-scale congestion events, known as **microbursts**, 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 microbursts.

In the past, I have spent some time probing **Named Data Networking (NDN)** as a new architecture proposed for the network layer that tries to resolve the limitations of IP-based architecture using names instead of IPs.

Work Experience

CCC Intelligent Solutions Company
Intern

2022

Chicago, US

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

HPDS(High Performance Data Storage) Company
Intern

2018

Tehran, Iran

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

Darmaneh Company
Android and IOS Developer

2016-2018

Tehran, Iran

Darmaneh was a startup which focused on creating a platform for online medical visits. I was responsible for developing the Android and IOS app using Java, Android Studio, and React Native.

Skills

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

Publications

Papers.....

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.....

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
- Journal Reviewer for Journal of Network and Computer Applications 2022
- Journal Reviewer for Ad Hoc Networks 2022