

# Hamid Hadian



✉ [hamidhadian@vt.edu](mailto:hamidhadian@vt.edu)

[Google Scholar](#)

## Education

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**Virginia Tech University** Virginia, USA

Fall 2022 – Present

*Ph.D. student in Computer Engineering (ECE- Department)*

*GPA (4.0/4.0)*

**Iran University of Science and Technology (IUST)** Tehran, Iran

Fall 2018 – Spring 2021

*M.Sc. in Computer Engineering*

*GPA (4.0/4.0)*

**Azad University Central Tehran Branch** Tehran, Iran

Spring 2000 – Fall 2005

*B.Sc. in Computer Engineering*

## Publications

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Hadian, H., Farrokh, M., Sharifi, M., Jafari, A., **An elastic and traffic-aware scheduler for distributed data stream processing in heterogeneous clusters**, *published in the journal of SuperComputing*

Farrokh, M., Hadian, H., M., Sharifi, M., Jafari, A., **SP-Ant: An Ant Colony Optimization Based Operator Scheduler for High Performance Distributed Stream Processing on Heterogeneous Clusters**, *published in Journal of Expert Systems with Applications*

Hadian, H., Sharifi, M., **GT-Scheduler: A Two-level Scheduler for Distributed Data Stream Processing Systems in a Heterogeneous Cluster**, *Accepted in journal of Cluster Computing*

R. Madhava Krishnan ,Naga Sanjana Bikonda, Shashwat Jain ,Wook-Hee Kim,Hamid Hadian, Vishwanath Maram, Changwoo Min **RETINA : Cross-layered Key-Value Store for Computational Storage**, **Accepted in** conference MASCOTS2023

Jinshu Liu, Hamid Hadian, Huaicheng Li Changwoo Min ., **Workload characteristic on the CXL memory**, *Submitted to SOSP '24*

Validi, A., Kashansky, V., Khiari, J., Hadian, H., Prodan, R., Li, J., Wang, F., Olaverri-Monreal, C., **Hybrid On/Off Blockchain Approach for Vehicle Data Management, Processing and Visualization Exemplified by the ADAPT Platform**, *accepted in the ITSC 2022 Conference*

Afzal, S., Tashtarian, F., Hadian, H., Erfanian, A., **OTEC: An Optimized Transcoding Task Scheduler for Cloud Environment**, *accepted in the ViSNext 2022 workshop*

## Honors

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- Best student 2018-2019 academic Year, master's Degree program, school of Computer Engineering
- 1<sup>st</sup> graduate student of the education course among students - 2021

## Current Activity

### **August 2022 - present(Virginia Tech University- ECE Department)**

- Researcher in COSMOSS (Computer Systems, Memory, OS ) Lab at Virginia Tech
- Supervisors: [Dr. Huaicheng Li](#) and [Dr. Changwoo Min](#)
- **Project Title : Exploring Acceleration Opportunities for CXL Memory to Reduce Memory Management Tax in the Operating System**
- **OS-level memory tiering for CXL memory**
- **Project Funding: Samsung Semiconductor USA, Memory Solutions Lab**

## Experiences

### **Sep 2021 - August 2022 (Austria - ITEC group - Klagenfurt University)**

- Researcher and project assistant of a number of European projects (Horizon Europe research), like (ADAPT, APOLLO, and Data Cloud)

### **Sep 2018 - Nov 2021 - (IUST University) - Distributed Systems Laboratory (DSLab)**

- Teacher assistant of **Distributed Systems** course (Fall 2021)
- Teacher assistant of **Cluster Computing** course (Winter 2020)
- Teacher assistant of **Distributed Systems** course (Fall 2020)
- Teacher assistant of **Operating Systems** course (Fall 2019)
- Supervisor of a number of graduate students in distributed systems laboratory
- Research on Linux, real-time operating systems architecture and embedded systems and IoT devices

### **Sep 2014 - Sep 2018 - Misagh Rayaneh Parsian Co. Software developer**

- ClimaWare system based on the embedded systems
- Android application gadget weather and rainfall forecasting (ClimaWare)
- Web-based ISO standard quality management software
- A CRM system for book shopping stores

## Review Activities

- Journal of IEEE Transactions on Parallel and Distributed Systems
- Journal of SuperComputing
- PDP 2022
- UbiSec 2021
- SuperComputing 2022
- NSDI 2024

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## Computer Skills

### Programming Languages.....

- ❖ C/C++
- ❖ JAVA
- ❖ Python
- ❖ Assembly

### 🔗 Frameworks and Tools.....

- ❖ Apache Storm
- ❖ Apache Flink

### 🔗 Software and Technologies.....

- ❖ Kafka
- ❖ RabbitMQ and ZeroMQ
- ❖ MPICH (Message Passing Interface software)