Saeed Fathollahzadeh

Curriculum Vitae

CONTACT INFO

 $\it Current Location:$ Database Lab, 2155 Rue Guy, 10^{th} Floor, Montreal, Canada.

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I'm Available at:

Homepage: https://fathollahzadeh.github.ioGithub: https://github.com/fathollahzadeh

dblp: https://dblp.uni-trier.de/pers/hd/f/Fathollahzadeh:Saeed

Google Scholar: https://scholar.google.com/citations?user=zIODCOoAAAAJ&hl=en

EDUCATION

■ Ph.D. in Computer Science, Concordia University

Montreal, Canada
Supervisors: Prof. Matthias Boehm, and Prof. Essam Mansour

Sep. 2023–Exp. Nov. 2025

■ Ph.D. in Computer Science, Graz University of Technology (TU Graz) Graz, Austria Supervisor: Prof. Matthias Boehm (transferred to Concordia University) 2021–Sep. 2023

■ M.Sc. in Software Engineering, Iran University of Science and Technology

Thesis: A Middleware for Distributed Processing of Complex Events

2012–2014

Supervisor: Prof. Mohsen Sharifi

WORK EXPERIENCE

• Know Center (https://know-center.at)

O Working on ReWaste F (Recycling and Recovery of waste for Future) Project

2021–Sep. 2023

Free University of Bolzano (DBS Group, https://dbs.inf.unibz.it)
 Working on Efficient and Scalable Solutions for Time Series Analysis
 March 2020–April 2021

• Bimito (https://bimito.com)

O Working with my Team on Making the Web Applications of Bimito

August 2016–March 2020

Ministry of Education (http://www.medu.ir)
 Teach Some Fundamental Courses Include C, C++, and Computer Networks

RESEARCH INTERESTS

The purpose of my research is to study data analytics: how to analyze, store, retrieve, and manipulate large and heterogeneous data sets. My research focuses on systems-oriented problems that arise when developing software to manage and process large and diverse data sets, especially machine learning systems.

PUBLICATIONS

- [1] **Saeed Fathollahzadeh**, Essam Mansour, and Matthias Boehm, "CatDB: Data-catalog-guided, LLM-based Generation of Data-centric ML Pipelines," *PVLDB (under review)*, 2025.
- [2] **Saeed Fathollahzadeh**, Essam Mansour, and Matthias Boehm, "Demonstrating CatDB: LLM-based Generation of Data-centric ML Pipelines," *SIGMOD (under review)*, 2025.
- [3] **Saeed Fathollahzadeh**, Kia Teymourian, and Chris Jermaine, "Impact of Object Models and Implementation on Big Data System Performance: A Controlled Study [Experiment, Analysis & Benchmark]," **PVLDB** (under submission), 2026.
- [4] **Saeed Fathollahzadeh** and Matthias Boehm, "GIO: Generating Efficient Matrix and Frame Readers for Custom Data Formats by Example," *SIGMOD*, 2023.
- [5] Sambasiva Rao Gangineni, Harshad Reddy Nalla, **Saeed Fathollahzadeh**, and Kia Teymourian, "Real-Time Object Recognition from Streaming LiDAR Point Cloud Data," DEBS, 2019.
- [6] **Saeed Fathollahzadeh**, Kia Teymourian, and Mohsen Sharifi, "Stateful Complex Event Detection on Event Streams Using Parallelization of Event Stream Aggregations and Detection Tasks," DEBS, 2016.
- [7] **Saeed Fathollahzadeh**, Reza Karimi, Mohsen Sharifi, Kia Teymourian, Ahmad Hasan, and Adrian Paschke, "Parallel Event Processing on Unbound Streams with Multi-step Windowing," DEBS, 2015.
- [8] Saeed Fathollahzadeh, "A Middleware for Distributed Processing of Complex Events," master of science thesis, Iran University of Science and Technology, Iran, 2014.

Honors and Awards

- DEBS'19 Grand Challenge and Grand Challenge Audience Award, (2019).
- 1nd Rank, Achieving First in the Ranking List of Research Assistant Procedure Among All Applications, Faculty of Computer Science at the Free University of Bozen-Bolzano, (2019).
- 2nd Rank, Nationwide M.Sc. Entrance Exam in Computer Engineering of Iranian Universities (Islamic Azad University of Qazvin), (2012).
- 1st Rank, Achieving the Highest GPA Among All University Computer Engineering Bachelor Students, (2009).
- 1st Rank, Achieving the Highest GPA Among All University Computer Engineering Associate Students, (2007).