

# Bahare Fatemi

Computer Science Department  
University of British Columbia  
2366 Main Mall, Vancouver, BC, Canada

Cell Phone: +1-604-446-8959  
bfatemi@cs.ubc.ca  
LinkedIn

- EDUCATION**
- ◇ **Ph.D. in Computer Science**, University of British Columbia, 2017 - present,  
**Research Area:** Graph Representation Learning, Relational Reasoning.  
**Supervisor:** Prof. David Poole.
  - ◇ **M.Sc. in Computer Science**, University of British Columbia, 2015 - 2017, **GPA: 90.8/100**,  
**Research Area:** Machine Learning, NLP, Information Retrieval (Link to thesis).  
**Supervisor:** Prof. David Poole.
  - ◇ **B.Sc. in Software Engineering**, Amirkabir University of Technology, 2011 - 2015, **GPA: 18.46/20**,  
**Thesis:** Efficient elimination ordering for inference in probabilistic graphical models.  
**Supervisor:** Prof. Shahram Khadivi.
- WORK EXPERIENCE**
- ◇ **Research Intern at Borealis AI:** June 2020 - October 2020, Research on structure learning for Graph Neural Networks, **Supervisor:** Layla El Asri and Seyed Mehran Kazemi.
  - ◇ **Research Intern at Element AI:** November 2018 - May 2020, Research on representation learning for knowledge (hyper)graphs, **Supervisors:** David Vázquez Bermúdez and Perouz Taslakian.
  - ◇ **Machine Learning Contractor at TELUS:** July 2016 - September 2017, Designed a probabilistic entity-resolution model for searching TELUS billing accounts. Our model improved TELUS's existing search tools (costing hundreds of thousand dollars per year) by 12%, **Supervisor:** Mike Tyndall.
  - ◇ **Software Developer at SOHATO:** February 2015 - August 2015, Back-end developer for a large national project in Iran, **Supervisor:** Amir Rasekh.
  - ◇ **Software Engineer Intern at TCI Khorasan Razavi:** May 2014 - August 2014, Design and implementation of an automated data management system, **Supervisor:** Davood Zohoorian.
- PUBLICATIONS**
- ◇ **Fatemi, B.**, Kazemi, S.M., and El Asri, L. "Self-Supervision Improves Structure Learning for Graph Neural Networks", Submitted to ICLR 2021.
  - ◇ **Fatemi, B.**, Taslakian, P., Vázquez D., and Poole, D. "Knowledge Hypergraph Embedding Meets Relational Algebra", Submitted to AAAI 2021.
  - ◇ **Fatemi, B.**, Taslakian, P., Vázquez D., and Poole, D. "Knowledge Hypergraphs: Prediction Beyond Binary Relations", IJCAI 2020, (link).
  - ◇ **Fatemi, B.**, Taslakian, P., Vázquez D., and Poole, D. "Knowledge Hypergraphs: Extending Knowledge Graphs Beyond Binary Relations", ECML Workshop on KGRL New Trends, September 2019.
  - ◇ **Fatemi, B.**, Ravanbakhsh, S., Poole, D. "Improved Knowledge Graph Embedding using Background Taxonomic Information", AAAI 2019, (link).
  - ◇ **Fatemi, B.**, Kazemi, S.M., Poole, D. "Record Linkage to Match Customer Names: A Probabilistic Approach", ICML Workshop on StarAI, July 2018, (link) .
  - ◇ Ramanan, N., Kunapuli, G., Khot, T., **Fatemi, B.**, Kazemi, S. M., Poole, D., Kersting, K., Natarajan, S. "Structure Learning for Relational Logistic Regression: An Ensemble Approach", Knowledge Representation and Reasoning (KR-2018) (longer version link).
  - ◇ Kazemi, S.M., **Fatemi, B.**, Kim A., Peng Z., Roy Tora M., Zeng X., Dirks M, Poole, D. "Comparing Aggregators for Relational Probabilistic Models", UAI Workshop on StarAI, August 2017, (link).
  - ◇ **Fatemi, B.**, Kazemi, S.M., Poole, D. "A Learning Algorithm for Relational Logistic Regression: Preliminary Results", IJCAI Workshop on StarAI, July 2016, (link).
- TEACHING ASSISTANCE**
- ◇ Artificial Intelligence, Algorithm Design, Computer Architecture, Data Structures

- HONORS AND AWARDS**
- ◇ Awarded The **President’s Academic Excellence Initiative PhD Award**, 2020, (link).
  - ◇ Awarded The **Borealis AI’s** graduate fellowship, 2019, (link).
  - ◇ Ranked top 5% in Google AI Open Images **Visual Relationship Track**, 2018.
  - ◇ Awarded the **4-Year Fellowship** (UBC’s Premier PhD Award), 26000 CAD per year, University of British Columbia, Vancouver, Canada, 2017 - 2021.
  - ◇ Awarded the **Student Service Award**, University of British Columbia, Vancouver, Canada, 2017.
  - ◇ Awarded the **UBC International Tuition Award**, 3200 CAD per year, University of British Columbia, Vancouver, Canada, 2015 - 2021.
  - ◇ **Ranked 1<sup>st</sup>** in **Cumulative GPA** among all students in Software Engineering department, Amirkabir University of Technology.
  - ◇ Awarded the **Best Student of the Year** title, Amirkabir University of Technology, 2013 - 2015.
  - ◇ Ranked 11th in **19th National Olympiad in Computer Engineering**, Tehran, Iran, 2014.
  - ◇ Ranked 22nd in International **Data Mining Cup (DMC)**, Berlin, Germany, 2014.
- TECHNICAL SKILLS**
- ◇ Python, PyTorch, TensorFlow, C/C++, Java, Ruby, MATLAB, Weka, JavaScript, HTML, SQL.
- ORGANIZATIONAL ACTIVITIES**
- ◇ **Women in Machine Learning (WiML) workshop co-organizer:** NeurIPS 2019, Vancouver.
  - ◇ **StarAI reading group Organizer:** Computer Science Department, UBC, 2017 - 2018.
  - ◇ **Comittee member**, at Focus of Women in CS: 2015 - present.
  - ◇ **Program Facilitator**, at GIRLsmart4tech: 2017 - present.
  - ◇ **Mentor**, at Girls Learning Code: 2017 - present.