Amirhossein Abaskohi September 19, 2000

Masters Student Majoring in Computer Science

in amirhossein-abaskohi | @ Google Scholar

Education

University Of British Columbia

Sept 2025 - Now

Ph.D in Computer Science

Department of Computer Science

• Supervisor: Giuseppe Carenini & Peter West

University Of British Columbia

Sept 2023 - August 2025

M.Sc in Computer Science

Department of Computer Science

- **GPA**: A+
- Supervisor: Giuseppe Carenini

University Of Tehran

Sept 2018 - Apr 2023 Ranked top 10% in class

B.Sc in Computer Engineering

Department of Electrical and Computer Engineering

• **CGPA:** 3.8/4 [Last Two Years GPA: 18.42 (4/4)]

Research Interests

• Multimodal Reasoning

- Explainble and Interpretable AI
- Deep Research

- NLP for Common-sense Reasoning
- Long Document Understanding
- Human Centered AI

Publications

CEMTM: Contextual Embedding-based Multimodal Topic Modeling

2025

Amirhossein Abaskohi, Amirhossein Abaskohi, Raymond Li, Chuyuan Li, Shafiq Joty, Giuseppe Carenini Submitted to EMNLP 2025

${ m FM^2DS}$: Few-Shot Multimodal Multihop Data Synthesis with Knowledge Distillation for Question Answering

2025

Amirhossein Abaskohi, Spandana Gella, Giuseppe Carenini, Issam H. Laradji Submitted to EMNLP 2025

AgentAda: Skill-Adaptive Data Analytics for Tailored Insight Discovery

2025

Amirhossein Abaskohi, Amrutha Varshini Ramesh, Shailesh Nanisetty, Chirag Goel, David Vazquez, Christopher Pal, Spandana Gella, Giuseppe Carenini, Issam H Laradji

Spotlight paper at REALM@ACL2025

StarFlow: Generating Structured Workflow Outputs From Sketch Images

2025

Patrice Bechard, Chao Wang, **Amirhossein Abaskohi**, Juan Rodriguez, Christopher Pal, David Vazquez, Spandana Gella, Sai Rajeswar, Perouz Taslakian

Submitted to WACV 2026

BigDocs: An Open and Permissively-Licensed Dataset for Training Multimodal Models on Document and Code Tasks

Juan A. Rodriguez, Xiangru Jian, Siba Smarak Panigrahi, Tianyu Zhang, Aarash Feizi, Abhay Puri, Akshay Kalkunte, Francois Savard (First Author Equal Contribution), **Amirhossein Abaskohi (Second Author Equal Contribution)**, Ahmed Masry, Perampalli Shravan Nayak, Mahsa Massoud, Rabiul Awal, Pierre-André Noël, Mats L. Richter, Saverio Vadacchino, Shubham Agarwal, Sanket Biswas, Ying Zhang, Sathwik Tejaswi Madhusudhan, João Monteiro, Krishnamurthy (Dj) Dvijotham, Torsten Scholak, Nicolas Chapados, Sean Hughes, Tamer Özsu, Aishwarya Agrawal, Marco Pedersoli, Christopher Pal, Perouz Taslakian, David Vazquez, Issam H. Laradji, Spandana Gella, Sai Rajeswar Mudumba ICLR 2025 & RBFM@NeurIPS2024

InsightBench: Evaluating Business Analytics Agents Through Multi-Step Insight Generation

2024

Gaurav Sahu, Abhay Puri, Juan Rodriguez, **Amirhossein Abaskohi**, Mohammad Chegini, Alexandre Drouin, Perouz Taslakian, Valentina Zantedeschi, Alexandre Lacoste, David Vazquez, Nicolas Chapados, Christopher Pal, Sai Rajeswar Mudumba, Issam Hadj Laradji

ICLR 2025

Benchmarking Large Language Models for Persian: A Preliminary Study Focusing on ChatGPT

Γ 2024 i Edalat, Sepehr

Amirhossein Abaskohi, Sara Baruni, Mostafa Masoudi, Nesa Abbasi, Mohammad Hadi Babalou, Ali Edalat, Sepehr Kamahi, Samin Mahdizadeh Sani, Nikoo Naghavian, Danial Namazifard, Pouya Sadeghi, and Yadollah Yaghoobzadeh LREC-COLING 2024

Beyond Words: A Multimodal and Multilingual Exploration of Persuasion in Memes

2024

Amirhossein Abaskohi*, Amirhossein Dabiriaghdam*, Lele Wang, Giuseppe Carenini SemEval@NAACL 2024

Can LLMs be Lateral Thinkers?

2024

Pouya Sadeghi *Amirhossein Abaskohi*, Yadollah Yaghoobzadeh SemEval@NAACL 2024

Paraphrasing-Guided Data Augmentation for Contrastive Prompt-Based Few-Shot Fine-Tuning

2023

 $\bf Amirhossein\ Abaskohi$, Yadollah Yaghoobzadeh, Sascha Rothe $\bf ACL\ 2023$

PEACH: Pre-Training Sequence-to-Sequence Multilingual Models for Translation with Semi-Supervised Pseudo-Parallel Document Generation

2023

Amirhossein Abaskohi*, Alireza Salemi*, Sara Tavakoli, Yadollah Yaghoobzadeh, Azadeh Shakeri LoResMT@EACL 2023

A Large-Scale Analysis of Persian Tweets Regarding Covid-19 Vaccination

2023

Taha ShabaniMirzaei, Houmaan Chamani, **Amirhossein Abaskohi**, Zhivar Sourati Hassan Zadeh, Behnam Bahrak **Springer's Social Network Analysis and Mining Journal**

Persian Emotion Detection using ParsBERT and Imbalanced Data Handling Approaches

2022

Amirhossein Abaskohi, Nazanin Sabri, Behnam Bahrak arXiv preprint arXiv:2211.08029

A Comparative Analysis of Sarcasm Detection Using Generative-based and Mutation-based Data Augmentation

2022

Amirhossein Abaskohi, Arash Rasouli*, Tanin Zeraati*, Behnam Bahrak SemEval@NAACL 2022

Automatic Speech recognition for Speech Assessment of Persian Preschool Children

2022

Amirhossein Abaskohi, Fatemeh Mortazavi, Hadi Moradi arXiv 2203.12886

Volunteering

• Publicity Chair for Future of NLP Workshop

Ост 2024-Dec 2024

Artificial Intelligence and Machine Learning Mentor in Summer School 2021

Summer 2021

Freelance Content Creation on Medium

Jul 2021-Present

• Freelance Content Creation on YouTube

Jul 2021-Present

• Working on The Backend API System of Cognitive Tests For Preschool Children Project

Nov 2020-Feb 2021

Honors and Awards

Selected for Spotlight Presentation: "AgentAda: Skill-Based Data Analytics Agents"

May 2025

Our paper was selected as a Spotlight Paper at the Workshop on Research on Agent Language Models (REALM) at ACL 2025, recognizing it among the top submissions. The work introduces AgentAda, a modular data analytics agent that dynamically retrieves and applies reusable "skills" for interpreting and analyzing tabular data. The recognition highlights both the novelty of our retrieval-augmented generation framework and its practical utility in automating insight-driven reasoning with large language models.

Mitacs Fellowship (Mitacs internship project IT41557)

Jun 2024

I was honored to receive the Mitacs Fellowship, which provided me with a unique opportunity to collaborate with industry partners on cutting-edge research projects. This experience allowed me to apply my academic knowledge to real-world challenges, enhancing my skills in problem-solving and innovation.

UBC International Tuition Award

April 2023

Recipient of the UBC International Tuition Award, recognizing academic excellence and providing financial support to eligible international graduate students at UBC.

UBC CS Strife Award April 2023

UBC CS Department Offers Additional Funding for Talented Students from Selected Countries.

Best Undergraduate Project Award

Sept 2022

My project on "Pre-Training Sequence-to-Sequence Multilingual Models for Translation with Semi-Supervised Pseudo-Parallel Document Generation" has been awarded as the best undergraduate project in the 16th Project Day competition of ECE school of the University of Tehran.

Supporter Foundation of University of Tehran Scholarship

Sept 2020

Awarded to the top 500 students among 35000 students in the university.

Admission to University of Tehran

Sept 2018

Ranked 46th (regional rank), and 1125th (national rank) among 144,437 participants in the Iranian Nationwide University Entrance Exam for Mathematics and Physics discipline.

Skills

 $\textbf{Programming Languages:} \ \ \text{Python, C} \\ \text{C++, SQL, C\#, Java, Dart, JavaScript, GNU Octave, MATLAB, Verilog HDL} \\ \text{The programming Languages:} \\ \text{Python, C} \\ \text{C++, SQL, C\#, Java, Dart, JavaScript, GNU Octave, MATLAB, Verilog HDL} \\ \text{The programming Languages:} \\ \text{Python, C} \\ \text{C++, SQL, C\#, Java, Dart, JavaScript, GNU Octave, MATLAB, Verilog HDL} \\ \text{The programming Languages:} \\ \text{Python, C} \\ \text{C++, SQL, C\#, Java, Dart, JavaScript, GNU Octave, MATLAB, Verilog HDL} \\ \text{The programming Languages:} \\ \text{Python, C} \\ \text{C++, SQL, C\#, Java, Dart, JavaScript, GNU Octave, MATLAB, Verilog HDL} \\ \text{The programming Languages:} \\ \text{Python, C} \\ \text{C++, SQL, C\#, SQL,$

Technologies: Git, Docker, Jupyter, Google Colab, LATEX

Tools: Pytorch, Tensorflow, Matplotlib, Jupyter, CUDA, Django, Flask, GraphQL, Apache Airflow, PowerBI

Operating Systems: Linux (Ubuntu, Parrot, Kali), Windows, MacOS, Cloudera