

Amirhossein Abaskohi

📍 Vancouver, Canada ✉ aabaskoh@cs.ubc.ca 📅 September 19, 2000 🔗 amirabaskohi.github.io
in amirhossein-abaskohi 🔄 AmirAbaskohi 🎓 Google Scholar

Education

University of British Columbia — Ph.D. in Computer Science

Vancouver, Canada

- **Supervisors:** A+
- **Supervisors:** Giuseppe Carenini, Peter West

Sep 2025 — Present

University of British Columbia — M.Sc. in Computer Science

Vancouver, Canada

- **GPA:** A+
- **Supervisor:** Giuseppe Carenini
- **Thesis:** Multimodal understanding of long documents : from topic modeling to question answering 🔗

Sep 2023 — Aug 2025

University of Tehran — B.Sc. in Computer Engineering

Tehran, Iran

- **CGPA:** 3.8/4 (Last Two Years GPA: 4/4)
- Ranked Top 10% in class

Sep 2018 — Apr 2023

Research Interests

- Multimodal Reasoning
- Long Document Understanding
- Deep Research
- NLP for Commonsense Reasoning
- Human-Centered AI
- Interpretable AI

Skills

ML/AI: PyTorch, TensorFlow, HuggingFace, Reinforcement Learning (RL), RLHF, RAG, ReAct, Chain-of-Thought (CoT), Tool Calling, OpenAI/Anthropic APIs, CUDA, Scikit-learn, spaCy, LangChain

Programming: Python, C/C++, Java, C#, SQL, JavaScript, MATLAB

Software/DevOps: Git, Docker, Flask, Django, CI/CD, Airflow, RabbitMQ, AWS Cloud

Databases & Analytics: PostgreSQL, MySQL, MongoDB, Spark, Elasticsearch, Grafana, PowerBI

Publications

2025

- **CEMTM: Contextual Embedding-based Multimodal Topic Modeling** 🔗
A. Abaskohi, R. Li, C. Li, S. Joty, G. Carenini.
EMNLP 2025.
- **ChartGaze: Enhancing Chart Understanding in LLMs with Eye-Tracking Guided Attention Refinement** 🔗
A. Salamatian, A. Abaskohi, W.-C. Fan, M. R. I. Hossain, L. Sigal, G. Carenini.
EMNLP 2025.
- **AgentAda: Skill-Adaptive Data Analytics for Tailored Insight Discovery** 🔗
A. Abaskohi, A. V. Ramesh, S. Nanisetty, C. Goel, D. Vazquez, C. Pal, S. Gella, G. Carenini, I. H. Laradji.
REALM@ACL 2025 (Spotlight).
- **FM²DS: Few-Shot Multimodal Multihop Data Synthesis with Knowledge Distillation for Question Answering** 🔗
A. Abaskohi, S. Gella, G. Carenini, I. H. Laradji.
EMNLP Findings 2025.
- **StarFlow: Generating Structured Workflow Outputs From Sketch Images** 🔗
P. Bechard, C. Wang, A. Abaskohi, J. Rodriguez, C. Pal, D. Vazquez, S. Gella, S. Rajeswar, P. Taslakian.
Submitted to WACV 2026.

2024

- **BigDocs: An Open and Permissively-Licensed Dataset for Training Multimodal Models on Document and Code Tasks** [↗](#)
J. A. Rodriguez, X. Jian, S. S. Panigrahi, T. Zhang, A. Feizi, A. Puri, A. Kalkunte, F. Savard (Equal 1st), **A. Abaskohi** (Equal 2nd), et al.
ICLR 2025 & RBFM@NeurIPS 2024.
- **InsightBench: Evaluating Business Analytics Agents Through Multi-Step Insight Generation** [↗](#)
G. Sahu, A. Puri, J. Rodriguez, **A. Abaskohi**, et al.
ICLR 2025.
- **Benchmarking Large Language Models for Persian: A Preliminary Study Focusing on ChatGPT** [↗](#)
A. Abaskohi, S. Baruni, M. Masoudi, et al.
LREC-COLING 2024.
- **Beyond Words: A Multimodal and Multilingual Exploration of Persuasion in Memes** [↗](#)
A. Abaskohi^{*}, A. Dabiriaghdam^{*}, L. Wang, G. Carenini.
SemEval@NAACL 2024.
- **Can LLMs be Lateral Thinkers?** [↗](#)
P. Sadeghi^{*}, **A. Abaskohi**^{*}, Y. Yaghoobzadeh.
SemEval@NAACL 2024.

2023

- **Paraphrasing-Guided Data Augmentation for Contrastive Prompt-Based Few-Shot Fine-Tuning** [↗](#)
A. Abaskohi, Y. Yaghoobzadeh, S. Rothe.
ACL 2023.
- **PEACH: Pre-Training Sequence-to-Sequence Multilingual Models for Translation with Semi-Supervised Pseudo-Parallel Document Generation** [↗](#)
A. Abaskohi^{*}, A. Salemi^{*}, S. Tavakoli, Y. Yaghoobzadeh, A. Shakeri.
LoResMT@EACL 2023.
- **A Large-Scale Analysis of Persian Tweets Regarding Covid-19 Vaccination** [↗](#)
T. ShabaniMirzaei, H. Chamani, **A. Abaskohi**, Z. Sourati, B. Bahrak.
Social Network Analysis and Mining (Springer).

2022

- **Persian Emotion Detection using ParsBERT and Imbalanced Data Handling Approaches** [↗](#)
A. Abaskohi, N. Sabri, B. Bahrak.
arXiv preprint.
- **A Comparative Analysis of Sarcasm Detection Using Generative-based and Mutation-based Data Augmentation** [↗](#)
A. Abaskohi, A. Rasouli^{*}, T. Zeraati^{*}, B. Bahrak.
SemEval@NAACL 2022.
- **Automatic Speech Recognition for Speech Assessment of Persian Preschool Children** [↗](#)
A. Abaskohi, F. Mortazavi, H. Moradi.
arXiv.

Volunteering

- Publicity Chair, Future of NLP Workshop [↗](#) — Oct 2024–Dec 2024
- AI/ML Mentor, Summer School [↗](#) — Summer 2021
- Freelance Content Creator, Medium [↗](#) — Jul 2021–Present
- Freelance Content Creator, YouTube [↗](#) — Jul 2021–Present
- Backend API Developer, Cognitive Tests for Preschool Children — Nov 2020–Feb 2021

Honors & Awards

President's Academic Excellence Initiative PhD Award (PAEIPA)

Aug 2025

Recognizes outstanding academic excellence among UBC doctoral students, awarded upon admission to the PhD program.

Graduate Support Initiative (GSI) Award

Aug 2025

Merit-based award for research excellence and academic achievement among UBC graduate students.

Spotlight Paper (AgentAda), REALM@ACL

May 2025

Selected as a Spotlight presentation at the ACL REALM 2025 workshop for its novelty and high reviewer ratings.

Mitacs Fellowship (Project IT41557)

Jun 2024

Competitive national fellowship supporting academic-industry collaboration during research at ServiceNow Research.

UBC International Tuition Award

Apr 2023

Awarded to outstanding international students demonstrating strong research potential and academic excellence.

UBC CS Strife Award

Apr 2023

Granted for exemplary performance and contributions within the Department of Computer Science.

Best Undergraduate Project Award

Sep 2022

Recognized as the top senior-year capstone project at the University of Tehran for innovation and technical depth.

Supporter Foundation of University of Tehran Scholarship

Sep 2020

Merit-based scholarship awarded to top-performing students in the Computer Engineering program.

Admission to University of Tehran

Sep 2018

Secured admission among the top 1% nationwide (National rank 1125 / 144,437; Regional rank 46) in Iran's national entrance exam.