AMIRHOSSEIN DABIRIAGHDAM

Department of Electrical and Computer Engineering, University of British Columbia, Vancouver, Canada
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EDUCATION

University of British Columbia (UBC)
- Ph.D. in Electrical and Computer Engineering *Sep. 2025 - Present*
- M.A.Sc. in Electrical and Computer Engineering *Sep. 2023 - Aug. 2025*

Thesis: "Combating Disinformation in the Age of Generative AI: From Watermarking LLMs to Persuasion Analysis of Memes"

Cumulative GPA: **96.3/100 (A+)** (*Thesis Grade:* **100/100**)

University of Tehran *Sep. 2018 - Jul. 2023*
- B.Sc. in Electrical and Computer Engineering

Thesis: "An Analysis of Forgettable Examples Extracted During Multilingual Models Training"

Cumulative GPA: **19.21/20 (A+)**

RESEARCH INTERESTS

- Natural Language Processing
- Decision Making
- LLM-as-Agent
- Information Theory

PUBLICATION

- SimMark: A Robust Sentence-Level Similarity-Based Watermarking Algorithm for LLMs
  Amirhossein Dabiriaghdam, *Lele Wang*
  ***EMNLP** Main Conference, Suzhou, China, November 2025.*
- BCAmirs at SemEval-2024 Task 4: Beyond Words: A Multimodal and Multilingual Exploration of Persuasion in Memes
  Amirhossein Abaskohi,* **Amirhossein Dabiriaghdam***, *Lele Wang, Giuseppe Carenini (***Equal Contribution**) Proceedings of the 18th International Workshop on Semantic Evaluation (SemEval-2024) @ **NAACL** 2024, Mexico City, Mexico, June 2024.*
- Targeted Adversarial Attacks against Neural Machine Translation
  Sahar Sadrizadeh, **Amirhossein Dabiriaghdam**, *Ljiljana Dolamic, Pascal Frossard*
  *IEEE **ICASSP**, Rhodes Island, Greece, June 2023.*

HONORS & AWARDS

- Awarded 4 Year Doctoral Flowship (4YF) from UBC. *2025*
- Received GSI Award from UBC. *2023 - 2024*
- Received International Tuition Award from UBC. *2023 - 2024*
- Received Homa Foundation Scholarship from UBC. *2023*
- Ranked 2nd among 120 bachelor students, University of Tehran. *2022*
- Ranked 537th among about 150000 participants in the Nationwide University Entrance Exam. *2018*
- Receiver of Faculty of Engineering (FOE) Award. *2019*
- Recognized as a talented student in the entrance exam of NODET for high school. *2014 - 2018*
- Kyokushin Karate Black Belt holder and member of IKO Kyokushinkaikan. *2008 - Present*

RESEARCH EXPERIENCE

Graduate Research Assistantship *Sep. 2023 - Present*
ECE department, University of British Columbia *Vancouver, Canada*
- Under the supervision of Dr. Giuseppe Carenini and Dr. Lele Wang.

Research Internship - EPFL Excellence in Engineering (E3) *Jul. 2022 - Sep. 2022*
Signal Processing Laboratory 4 (LTS4), EPFL *Lausanne, Switzerland*

- Worked on the targeted adversarial attacks against neural machine translation models.
- Under the supervision of Dr. Pascal Frossard.

Undergraduate Research Assistantship *Sep. 2022 - Jul. 2023*
ECE department, University of Tehran *Tehran, Iran*

- Worked on analyzing the effect of forgettable examples training on the out-of-distribution generalization of multilingual models in single- and multi-source training (for my bachelor's thesis).
- Under the supervision of Dr. Yadollah Yaghoobzadeh.

Summer Internship *Jul. 2021 - Sep. 2021*
HARA.ai Co *Tehran, Iran*

- Worked on developing a chatbot natural language understanding unit using state-of-the-art deep learning models. (GitHub)
- Under the supervision of Dr. Reshad Hosseini.

TEACHING EXPERIENCE

Graduate Teaching Assistant, *University of British Columbia*

- **CPSC 422 - Intelligent Systems**
  Instructor: J. Johnson *Winter 2023 & Fall 2025*
- **CPSC 422 - Intelligent Systems**
  Instructor: Dr. G. Carenini *Winter 2024*
- **CPSC 322 - Introduction to AI**
  Instructor: Dr. M. Oveisi *Fall 2024*
- **CPEN 311 - Digital Systems Design**
  Instructor: Dr. Y. Linn *Summer 2025*

Undergraduate Teaching Assistant, *University of Tehran*

- **Engineering Probability & Statistics**
  Instructor: Dr. B. Bahrak *Fall 2022*
- **Signals and Systems**
  Instructor: Dr. S. Akhavan Behabadi *Winter 2022*
- **Engineering Mathematics**
  Instructor: Dr. M. Mohammad Taheri *Fall 2020*
- **Introduction to Computing Systems and Programming**
  Instructor: Dr. M. Moradisabzevar *Fall 2019*

RELEVANT COURSES (Graduate courses are indicated by †)

- **NLP meets HCI†** **(90/100)**
  Instructor: Dr. G. Carenini
- **Machine Learning†** **(92/100)**
  Instructors: Dr. M. Schmidt & Dr. J. Clune
- **Deep Learning with Structures†** **(95/100)**
  Instructor: Dr. R. Liao
- **Reinforcement Learning†** **(20/20)**
  Instructor: Dr. M. Nili Ahmad Abadi
- **Linear Algebra** **(20/20)**
  Instructor: Dr. M. J. Yazdanpanah
- **Data Structures** **(19.7/20)**
  Instructor: Dr. R. Shojaee
- **NLP Commonsense†** **(99/100)**
  Instructor: Dr. V. Shwartz
- **Information and Coding Theory†** **(94/100)**
  Instructor: Dr. C. Leung
- **Fundamentals of Visual Computing†** **(93/100)**
  Instructor: Dr. X. Li
- **Natural Language Processing†** **(20/20)**
  Instructors: Dr. Y. Yaghoobzadeh & Dr. H. Faili
- **Artificial Intelligence** **(20/20)**
  Instructors: Dr. H. Fadaei & Dr. M. Moradi
- **Algorithm Design** **(19.1/20)**
  Instructor: Dr. M. Asadpour

TECHNICAL SKILLS

Programming Languages	Python, C/C++, MATLAB, Verilog, Visual Basic Familiar with C#, JAVA, PHP, SQL, JS, Assembly
ML/AI toolkits	Huggingface Transformers, PyTorch, Tensorflow, Keras, NumPy, Pandas, scikit-learn, OpenCV
Engineering & Simulation Software	MATLAB Simulink®, ModelSim, Quartus, Proteus, CoppeliaSim, ROS, Gazebo
Technology	LaTeX, MQTT, Git, MakeFile Familiar with ARM (STM32), AVR, Arduino, ESP32

LANGUAGES

Persian	Native (Bilingual proficiency)
Turkish (Azari)	Native (Bilingual proficiency)
English	Full professional proficiency

REFERENCES

- Dr. Giuseppe Carenini [Full Professor]
- Dr. Lele Wang [Assistant Professor]