# Amir Reza Mohammadi

# Contact Information

- o @ amirreza.m95@gmail.com
- o in amirreza-mohammadi-75936039
- o لگ
- **Q** github.com/amirreza-m95

amirreza-m95.github.io

# **Research Interests**

Topics: Machine Learning, Recommender Systems, Graph Neural Networks, Explainable AI

# Education

- 2022 Pres. **PhD Cand. in Computer Science**, *Universität Innsbruck*, Innsbruck, Austria Thesis Explainable Graph Neural Network Recommenders (**Q**), Supervisor: Dr. Eva Zangerle *e*
- - 2018 Visiting Researcher, Studied as an EU funded Erasmus+ project called GraDAna in partnership with Vienna University of Technology (TUVIE), University of Bonn (UoB) and 9 other partners and universities., Bonn, Germany *s*
- 2014 2018 B.Sc. in Information Technology, Institute for Advanced Studies in Basic Sciences (IASBS)
   Thesis Twitter Sentiment Analysis Using Apache Spark MLLib. Supervisor: Dr. Zahra Narimani ø
   GPA 18.14/20.0 | Ranked 4/48

# Publications

- ⇒ A.R. Mohammadi, E. Zangerle: "Explainable Graph Neural Network Recommenders; Challenges and Opportunities" (Accepted at RecSys23) (■)
- ⇒ A. Peintner, A.R. Mohammadi, E. Zangerle: "SPARE: Shortest Path Global Item Relations for Efficient Session-based Recommendation" (Accepted at RecSys23) (□, ○)
- ⇒ A.R. Mohammadi, A. Peintner, E. Zangerle: "Reproducibility and Comparative Analysis of GNN Counterfactual Explanations with Adversarial Examples" (Submitted to SIGIR24) (■, ○)
- ⇒ A.R. Mohammadi, A.H. Karimi, M. Bohlouli, E. Zangerle, G. Specht: "HPT4Rec: AutoML-based Hyperparameter Self-Tuning framework for session-based Recommender Systems" (Accepted at GvDB2022)(■, ○)
- ⇒ M.H. Nazeri, M. Bohlouli, A.R. Mohammadi, M. Bohlouli: "GMM-TF: Adaptive Generative Multi-Modal Framework for Trajectory Forecasting in Autonomous Vehicles" (not peerreviewed)(□, ○)

# Academic Experience

- TA Big Data Analytics course page &
- $\hookrightarrow \ \ \mathsf{Teacher:} \ \ \mathsf{Dr.} \ \ \mathsf{Mahdi} \ \mathsf{Bohlouli}$
- $\hookrightarrow \ \ \, \text{Year: } 2020$
- TA Data Engineering course page &
- $\hookrightarrow$  Teacher: Dr. Eva Zangerle
- $\hookrightarrow$  Year: 2023

- TA Software Engineering course page &
- $\hookrightarrow$  Teacher: Dr. Mohsen Afsharchi
- $\hookrightarrow$  Year: 2017

## TA Algorithm Design and Data Structure &

- $\hookrightarrow \ \ \mathsf{Teacher:} \ \ \mathsf{Dr.} \ \ \mathsf{Mansoor} \ \ \mathsf{Davoodi} \ \mathsf{Monfared}$
- $\hookrightarrow \ \ \, \text{Year: 2016}$

#### 2019 - 2021 Research assistant at Intelligent Systems Group (ISG), IASBS

## Work Experience

- Summer 2021 ML Consultant, focused on data preparation using Python. MelkRadar Co. Tehran, Iran
   Fall 2020 Language Contributor at WordUp, Geeks Ltd, London, UK (Remote)
   2019 2020 Funded Startup Co-Founder (Kaseb), Arvancloud Company, Tehran, Iran
- 2017 2018 SarvTech company research internship, Supervisor: Dr. Peyman Pahlevani

#### Skills

Languages Persian (Native), English (IELTS: Band 7), Azeri (Fluent), Arabic (Basic), German (A2)
Programming Python (comfortable with ♣, 5+ years), C++ (2 years), Erlang (1 year)
Tools, Tech. Linux (7+ years), Git (7+ years), LargX (6+ years), Microsoft NNI (2+ year)
Libraries Python Scientific Stack (5+ years), PyTorch (4+ years), Apache Spark (2+ years)

## Accomplishments

Sep. 2021 Participated in 1<sup>st</sup> AutoML Fall school conducted by LMU Munich, Uni Friburg and LUH.

- Mar., 5-6 State of Accomplishment in Deep Learning tutorial at International Conference on Contemporary 2019 Issues in Data Science (CiDaS) (*s*)
- Aug. 2018 Selected as the Exceptionally Talented Student in the undergraduate program, IASBS.
- Nov. 2016 Participated in 3<sup>rd</sup> Junior World Entrepreneurship Forum (JWEF), Zanjan, Iran &
- Feb 2016 2<sup>nd</sup> place in FinTech Competition, Science and Technology Park, Zanjan, Iran ø
- Jul. 2015 Member of IASBS IoT team, achieving top teams title in "IoT Cup", Iran University of Science and Technology, Tehran, Iran
  - 2015 Received Government scholarship during bachelor's studies in Information Technology.
- Apr. 2010 Participated in RoboCup IranOpen competition and symposium, Junior Demo, Tehran, Iran &

## Volunteer Works

- Nov. 2017 University representer at 5<sup>th</sup> exhibition of ELECOMP fair, Zanjan, Iran
- Mar. 2019 Staff member of the International Conference (CiDaS), held at IASBS, Zanjan, Iran ø
- May 2020 Held Pilates (type of mind-body exercise) sessions for CS students, IASBS
- 2019 2021 Weekly paper presentation, ISG group, IASBS
- Jul. 2018 Member of executive committee in 5 $^{th}$  Hepatitis Awareness Campaign in Iran.  ${\scriptstyle {\cal S}}$
- 2019-2020 Member of the executive team in Mehraneh charity's events (Cancer patients)
- 2019-2021 Coding session and Github page organizer in ISG, IASBS

### Hobbies

 $\Rightarrow~$  Hiking ~ Camping ~ Board games ~ Playing Golf ~ Reading on Blinkist ~