

Amirhossein Ghadiri

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PERSONAL DETAILS

Birthdate May 8, 1997
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EDUCATION AND EXPERIENCE

PhD Candidate, Business Management Oct. 2025 –
DL4SG Research Group, Cardiff Business School, Cardiff University, Cardiff, UK
Research area: Developing AI-based frameworks to improve the resilience of health and care service delivery in Wales against rising sea levels and flooding.
Supervisor: Prof. Bahman Rostami-Tabar

Visiting Researcher, Constr. Eng. and Manage. Sept. 2023 – Sept. 2025
Purdue University, Indiana, USA
Research area: Developing ML and LLM-based frameworks to evaluate the risk associated with road construction work zone intrusion.
Supervisor: Dr. Sogand Hasanzadeh

M.Sc. in Construction Eng. and Manage. Sept. 2019 – Oct. 2022
Amirkabir University of Technology, Tehran, Iran
Research area: Research Area: Developing computer vision models to automate the evaluation of personal protective equipment compliance.
Supervisor: Dr. Vahid Shahhosseini
(GPA: 18.62/20 (4/4) 2nd ranking)

B.Sc. in Civil Engineering Sept. 2015 – Sept. 2019
Amirkabir University of Technology, Tehran, Iran
(GPA: 15.01/20)

Diploma in Mathematics and Physics Sept. 2011 – Sept. 2015
Kamal high school and pre-university, Tehran, Iran
(GPA: 19.67/20 (4/4))

RESEARCH INTERESTS

Utilizing Data Analytics, Machine Learning, Deep Learning, Computer Vision, and NLP to solve real-world complex challenges, specifically in the fields of Healthcare Management and Construction Management.

PUBLICATIONS, COMPLETED AND ONGOING PROJECTS

1. "Combining computer vision with fuzzy logic for real-time evaluation of personal protective equipment compliance" (1st name, under review by Int J Occup Saf Ergon.)
<https://github.com/amirhosseinghdv/PPE-Noncompliance-Evaluation>
2. "Leveraging Large Language Models and Deep Learning for Construction Work Zone Intrusion Risk Assessment" (1st name, Accepted by I3CE 2025, will be published soon)
3. Activity Recognition for rational evaluation of personal protective equipment compliance. (In progress)
4. Semantic segmentation for asphalt cracks on PyTorch.
<https://github.com/amirhosseinghdv/Crack-Segmentation>
5. Predicting total vaccinations by the best regression ML algorithm chosen by PyCaret.
<https://github.com/amirhosseinghdv/Covid-Vaccination>
6. Identifying customers exiting the customer cycle by using the best classification ML algorithm found out by PyCaret.
<https://github.com/amirhosseinghdv/Identifying-exiting-customers>
7. Performing project planning and control on a large-scale project using MSP.

SKILLS

<i>Language</i>	Persian(Mother Tongue) English(Foreign Language) TOEFL: 110/120, R:29, L:30, S:24, W:27 (Jul. 2025) GRE: 328/340, Q:169, V:159, W:4 (Nov. 2022)
<i>Programming and AI</i>	Python, Data Analytics, Machine/Deep Learning, Computer Vision, Statistical Learning, Forecasting, NLP, GenAI, LLMs, TensorFlow, PyTorch, Git, GAN, RNN, Signal Processing, Robotics, ROS, RL
<i>Software</i>	Microsoft Project, Autodesk Autocad(2D), Microsoft Office

HONORS AND AWARDS

1. Ranked **591st** among more than 200,000 participants in Nation-Wide University Entrance Exam.
2. Ranked **the top 30** among 107 peer B.Sc. students of Civil and Environmental Engineering at AmirKabir University of Technology.
3. Ranked **75th** among more than 30,000 participants in Nation-Wide University Entrance Exam of Civil Eng.
4. Ranked **2nd** among 17 peer M.Sc. students of Construction Engineering and Management at AmirKabir University of Technology.
5. Offered Straight Ph.D. Admission in the Construction Engineering and Management at AmirKabir University of Technology.