Amirhossein Ghadiri

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PERSONAL DETAILS

Birthdate	May 8, 1997
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LinkedIn	`https://linkedin.com/in/amirhossein-ghadiri-8296781a6`
GitHub	`https://github.com/amirhosseinghdv`

EDUCATION AND EXPERIENCE

PhD Candidate, Business Management Oct. 2025 –

DL4SG Research Group, Cardiff Business School, Cardiff University, Cardiff, UK

Research area: Developing AI-driven solutions 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: Developing computer vision models to automate the evaluation of personal protective equipment compliance.

Supervisor: Dr. Vahid Shahhosseini

(GPA: 18.62/20 (4/4) 2^{nd} 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 Machine/Deep Learning, Statistics, Operations Research, Forecasting, Computer Vision, and NLP to solve real-world complex challenges.

PUBLICATIONS, COMPLETED AND ONGOING PROJECTS

1. "Leveraging Large Language Models and Deep Learning for Construction Work Zone Intrusion Risk Assessment" (1^{st} name, I3CE 2025)
`https://ascelibrary.org/doi/abs/10.1061/9780784486436.047`

2. "Combining computer vision with fuzzy logic for real-time evaluation of personal protective equipment compliance" (1^{st} name, under review by Int J Occup Saf Ergon.)
`https://github.com/amirhosseinghdv/PPE-Noncompliance-Evaluation`

3. Semantic segmentation for asphalt cracks on PyTorch.
`https://github.com/amirhosseinghdv/Crack-Segmentation`

4. Predicting total vaccinations by the best regression ML algorithm chosen by PyCaret.
`https://github.com/amirhosseinghdv/Covid-Vaccination`

5. Identifying customers exiting the customer cycle by using the best classification ML algorithm found out by PyCaret.
`https://github.com/amirhosseinghdv/Identifying-exiting-customers`

6. Performing project planning and control on a large-scale project using MSP.

SKILLS

Language	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)
Programming and AI	Python, Data Analytics, Machine/Deep Learning, Computer Vision, Statistical Learning, Operations Research, NLP, GenAI, LLMs, Forecasting, R, TensorFlow, PyTorch, Git, GAN, RNN, Signal Processing, Robotics, ROS, RL
Software	Microsoft Project, Autodesk Autocad(2D), Microsoft Office

HONORS AND AWARDS

1. Awarded the prestigious fully funded **ESRC** Doctoral Studentship from **UK Research and Innovation (UKRI)** for PhD studies in recognition of research potential.

2. Ranked **591**st among more than 200,000 participants in Nation-Wide University Entrance Exam.

3. Ranked **the top 30** among 107 peer B.Sc. students of Civil and Environmental Enginering at AmirKabir University of Technology.

4. Ranked **75**th among more than 30,000 participants in Nation-Wide University Entrance Exam of Civil Eng.

5. Ranked **2**nd among 17 peer M.Sc. students of Construction Engineering and Management at AmirKabir University of Technology.