

Hamed Fathi

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EDUCATION

BSc in Civil Engineering

Sep 2014 – Mar 2019

Islamic Azad University, Karaj Branch, Karaj, Iran ([Ranked the best university in engineering in Iran based on U.S.News](#))

Cumulative GPA: (3.3/4)

High School Diploma Shahid Soltani

Under the supervision of National Organization for Development of Exceptional Talents (NODET) Major: Math-Physics

Cumulative GPA: (3.5/4)

RESEARCH INTERESTS

- Deep Learning
 - Reinforcement Learning
 - Machine Learning
 - Data Science
 - Perception and Motion Planning
 - Computer Vision
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AWARDS & HONORS

- **Being Accepted to Artificial Intelligence and Robotics Master's Degree Program** in nationwide universities entrance exam in Iran in Islamic Azad University, South Tehran Branch in 2019.
 - **Ranked within top 20% of my graduating class** in civil engineering in Islamic Azad University, Karaj Branch.
 - **Member of First rank team** in HackaIran which is a branch of HackaGlobal and was a programming challenge for programmers and developers. Me and my friends as a team won this challenge 2 times among 10 to 12 other teams.
 - **Be awarded as a top researcher in Startup house** which is a place for teams who work on their ideas for new startups and it's an innovation center in Karaj for startups. Website: <https://khanestartup.ir/>
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PUBLICATIONS

- Almasi, M., **Fathi, H.**, Ghaeinian, S.A. & Samiee, S. (2019). Analyzing Human motion recognition from first person POV, case study three basic athletics tasks. Accepted, International Journal of Computer Applications (IJCA) 10.5120/ijca2019919703
- Almasi, M., Ghaeinian, S.A. & Samiee, S., **Fathi, H.** (2019). Investigating the application of human motion recognition for athletics talent identification using the head-mounted camera. Accepted, 5th International Conference on Inventive Computation Technologies (ICICT-2020)
- Mirzaei, A., **Fathi, H.** & Aghakochakzadeh, A. (2019). Efficient schwannoma histopathologic image detection using transfer learning and deep learning. *Modern Pathology* (to be submitted)
- Mirzaei, A., **Fathi, H.**, Aghakochakzadeh, A., Almasi, M. (2019). Interpretation of schwannoma histopathologic image detection using transfer learning and deep learning. (to be submitted)
- Nourmohammadi, J., **Fathi, H.** (2019). A survey of Self Driving Cars algorithms. (In press)

WORKING & TEACHING EXPERIENCES & PROJECTS

- **Deep Learning Researcher and Developer:** Apr 2019 – Present
Working on anomaly histopathologic image detection using deep learning and analysis of human pose recognition from first person viewpoint.
- **Self Driving Cars Researcher:** Working with a group of researchers on self driving cars. My Job is reading research papers and writing review of those papers and developing object detection algorithm. Apr 2019 - Present
- **Teacher Assistance:** Islamic Azad University, Karaj Branch, Karaj, T.A for Dr. Mirhosseini 2015 - 2018
- **Computer Vision Coder:** Worked on SSD algorithm for plate detection with our team for Municipality of Karaj in Startup House. GitHub: <https://github.com/Hamifathi/License-Plate-Detection> Mar 2018 - Jul 2018
- **NLP and AI Developer:** developing a Restful API system with TensorFlow and Flask for Q&A in NerdPitch which was a presentation platform for presenting ideas in Startup House. Jul 2018 – Sep 2018
GitHub: https://github.com/Hamifathi/text_similarity
- **Back End Developer:** Working as JavaScript, NodeJS programmer. I developed backend side of admin panel in Test Hub which was A crowd testing app for web/mobile applications that can test everything from Usability to Bug Detection in Startup House.
- **Web programming with Django:** When I wanted to learn Django, I made a blog post app to become familiar with Web programming especially Back End development. GitHub: https://github.com/Hamifathi/blog_post-app

COURSEWORK &
ONLINE MOOCS:

Coursework:

- Calculus 2: **17.5/20**
- Physics: **18/20**
- General Programming: **17.5/20**
- Statistics and Probability: **15.5/20**
- Statics: **17/20**
- Quantity surveying and estimating: **17/20**
- Seismic Engineering: **19.1/20**

Online MOOCS:

- **Deep Learning** Specialization DeepLearning.ai
Coursera: 4 Courses completed, 1 in progress
coursera.org/verify/ZD2V9BALE43F
coursera.org/verify/PZSVFAAZRG48
coursera.org/verify/9UDQRA5ZCX5L
coursera.org/verify/VAMCC277KZ5N
- **Mathematics for Machine Learning** Imperial
College London Coursera: Certificate:
coursera.org/verify/specialization/ZWWDF44ETFRP
- **CS50 Introduction to Computer Science** Harvard
EDX
- **Algorithms and Data Structures** Stanford
GitHub: <https://github.com/Hamifthi/Algorithms-and-Data-Structures>
- **Machine Learning** Stanford (Prof Andrew Ng)
GitHub: <https://github.com/Hamifthi/Machine-Learning-Practice>
- **CS231n Convolutional Neural Networks for Visual Recognition** Stanford
GitHub: <https://github.com/Hamifthi/CS231n-programming-assignment>
- **Linear Algebra** MIT OCW (Prof Gilbert Strang)
- **Fast.ai** Deep Learning for coders
- **Reinforcement Learning** DeepMind (Prof David Silver)

SKILLS

- **Programming Languages:** Python (proficient), JavaScript (Experienced), C&C++ (Experienced)
- **Programming Frameworks:** TensorFlow, Fastai, PyTorch, Django, Flask, Scikit_Learn, Node.js, Numpy/Scipy, Mongo DB

LANGUAGE

- **Persian:** Native
- **English:** Fluent

TOEFL IBT score: 97, R:25, L:29, S:21, W:22

GRE score: Will be taken in February 2020

REFERENCE

- **Dr. Matin Baymani Nezhad**, matin.baymani@kiau.ac.ir
Assistant Professor, Department of Engineering, Civil Engineering, Islamic Azad University, Karaj Branch, Karaj, Iran
- **Dr. Mohsen Mirhosseini**, m_mirhosseini@sbu.ac.ir
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