Hamed Fathi

E-mail: hamedfathi.s2019@gmail.com **Phone Number:** (+98) 919 704 2084

ResearchGate: www.researchgate.net/profile/Hamed_Fathi4

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

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/

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**: Working on anomaly histopathologic image detection using deep learning and analysis of human pose recognition from first person viewpoint. — Apr 2019 – Present
- **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/Hamifthi/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. GitHub: https://github.com/Hamifthi/text_similarity — Jul 2018 – Sep 2018
- **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/Hamifthi/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/CS231.n-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