

Behrad Mansouri

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RESEARCH INTERESTS

Thermodynamics Fluid Mechanics Heat Transfer

EDUCATION

Amirkabir University of Technology (Tehran Polytechnic) September 2019 - present
B.Sc. in Mechanical Engineering GPA: 3.64/4
Supervisor: Dr. Mohsen Bahrami

Allameh Tabatabaei High School September 2016 - June 2019
Diploma in Mathematics and Physics GPA: 19.32/20

GRE General Test Score September 2022
Verbal Reasoning: 158
Quantitative Reasoning: 168

TECHNICAL SKILLS

Python: Numpy, jupyter, Matplotlib **ML/AI:** Tensorflow, Keras
Engineering Software EES, MSC Adams, catia **Misc:** Bash script, L^AT_EX

LANGUAGE SKILLS

Persian: Native **English:** IELTS 8/9 **Band scores:** Speaking 7.5, Listening 9, Reading 8.5, Writing 7

TEACHING EXPERIENCE

Thermodynamics (I) Fall 2021
Teaching Assistant Instructor: Dr. Hashem Moradi

NOTABLE COURSEWORK PROJECTS

Fuels & Combustion Spring 2022
Instructor: Dr. Ehsan Amani

- Preliminary design of a gas turbine combustor using EES [↗](#)

Heat Transfer (I) Spring 2022
Instructor: Dr. Behzad Baghapour

- Heat transfer analysis of a falling hollow sphere [↗](#)
- Generalized solution for variable conductivity transient conduction [↗](#)

Machine Learning Summer 2022
Kaggle Dogs vs. Cats classification with a convolutional neural network [↗](#)
Instructor: Dr. Behzad Baghapour

Classification of natural gas consumption of household consumers with machine learning Fall 2022
Instructor: Dr. Nader Montazerin

ACHIEVEMENTS AND AWARDS

Achieved top 0.4% place among all applicants of the nationwide university entrance exam for B.Sc. in Mathematics and Engineering (658th out of Approximately 160,000 participants) 2019

Admitted in the First stage Nation-wide Mathematics contest of “Olympiad” 2017

NOTABLE COURSES

Thermodynamics (I): A+, Thermodynamics (II): A, Fuels & Combustion: A
Fluid Mechanics (I): A, Heat Transfer (I): A+

REFERENCES

Dr. Mohsen Bahrami - Professor Email, Faculty profile
Department of Mechanical Engineering, Amirkabir University of Technology

Dr. Behzad Baghapour - Assistant Professor Email, Faculty profile
Department of Mechanical Engineering, Amirkabir University of Technology

Dr. Hashem Moradi - Lecturer Email
Department of Mechanical Engineering, Amirkabir University of Technology