



## Taha Heidari

**Nationality:** Iranian  
**Date of Birth:** 20.09.1996  
**Gender:** Male

### Contact

**Address**  
Otakaari, 20, A2,  
Espoo, Finland, 02150

**Email:**  
Newsince2@gmail.com

**Phone:**  
(+358)468964613

**LinkedIn:**  
<https://www.linkedin.com/in/taha-heidari-0294261a5>

**Hobbies**  
Kiteboarding  
Running  
Guitar Playing

## About ME

Master's Student in Automation Engineering with about 2 years of work experience in Data Engineering and 1 year of academic work as a Teaching Assistant in Machine Learning Courses at university.

Working with different datasets and implementing different Machine Learning methods. Extracting Bayesian Inference from datasets using Monte Carlo Markov Chain (MCMC) methods. Working with Flutter as a powerful framework to build user-friendly apps.

Eager to learn new frameworks in Machine Learning, Data Science and AI. currently looking forward to get a master's thesis position.

## EDUCATION AND TRAINING

### Aalto University

**Master of Science in Automation and Electrical Engineering**  
01/09/2021 – CURRENT [Espoo, Finland] (GPA: 4.13/5)

- Major Specialization: Control, Robotics and Autonomous Systems
- Minor Specialization: Machine Learning, Data Science and Artificial Intelligence (minor courses)
  - Machine Learning (5/5)
  - Machine Learning with Python (5/5)
  - Deep Learning (5/5)
  - Artificial Intelligence (4/5)
  - Deep Learning with Python
  - Machine Learning: Advanced Probabilistic Methods
  - Bayesian Data Analysis
  - Reinforcement Learning
  - Computer Vision
  - Machine Learning: Supervised Methods

### Kermanshah University of Technology

**Bachelor of Science in Electrical Engineering**  
23/09/2007 – 19/02/2012 [Tehran, Iran] (GPA: 4.59/5)

## WORK EXPERIENCE

### Data Engineer

Peyman Gharb Company  
01.08.2019 – 31.08.2021 [Kermanshah, Iran]

- Data Analyzing: predicting the best time to exit 20 KV feeders from the network based on the demand and generated electricity from power plants
- MCMC analysis of supply-and-demand using different Bayesian deep learning architectures (analyzing the peak hours of electricity consumption to decide which power units must be cut from the network)

## ML Teaching Assistant

Sharif University of Technology

**01.01.2022 – Current – Tehran, Iran**

- Designing different Machine Learning assignments for master's students
- Instructing students in their programming assignments during the exercise sessions
- Programming the ID3 decision tree of the IRIS dataset on adult's income level and modifying it by pruning algorithms without using Python ML libraries
- Programming the Bayes method of a plant-classifier on the IRIS dataset on flowers without using Python ML libraries
- Programming the Logistic Regression algorithm on a text classifier with Reuters-21578 dataset and comparing it with a Naïve Bayes classifier with the same dataset in terms of accuracy and speed, training the algorithm with k-fold cross validation, analyzing the effects of overfitting of training data on the results
- Linear and nonlinear programming of SVM algorithm in different moods like soft, RBF kernel, and polynomial kernel for classifying the IRIS dataset on adult's income level
- Classifying the MNIST dataset with a multilayer perceptron neural network (MLP)

## MCMC Analysis Project Work

Aalto University

**11.01.2022 – 03.06.2022 – Espoo, Finland**

- Developing several Markov chain Monte Carlo (MCMC) algorithms from scratch to predict the future population of Canadian lynxes as our famous time-series dataset
- Applying MCMC methods to Deep Learning Architectures for Bayesian ML Analysis

## Honors

- 1st Rank in 2-stage Regional Physics Competitions, Kermanshah, Iran (2012).
- 1st Rank, Achieving the highest GPA among all 40 university Electrical Power Engineering graduate students with GPA: 4.59/5, Kermanshah University of Technology, Iran (2014-2018).
- 4th Rank, 22nd National Collegiate Scientific Olympiad in Electrical Engineering, First Stage, Kermanshah, Iran (2017).
- 3rd Rank, 23rd National Collegiate Scientific Olympiad in Electrical Engineering, First Stage, Kermanshah, Iran (2018).
- 31st Rank, 22nd National Collegiate Scientific Olympiad in Electrical Engineering, Second Stage, Tehran, Iran (2017).
- 29th Rank, 23rd National Collegiate Scientific Olympiad in Electrical Engineering, Second Stage, Tehran, Iran (2018).

## Language Skills

### MOTHER TONGUE(S):

**Persian**

### OTHER LANGUAGE(S):

#### English

Listening  
C1

Speaking  
C1

Reading  
C1

Writing  
C1

#### Finnish

Listening  
A1

Speaking  
A1

Reading  
A1

Writing  
A1

## Other Skills

### Programming Languages

R, Python, JavaScript, Dart, C, C++, Java, MATLAB

### Machine Learning

TensorFlow, Keras, PyTorch, scikit-learn, pandas, NumPy

### Software & Tools

LaTeX, Git, PowerBI

### Cloud Services

Microsoft Azure

### Databases

MySQL

### Web

Django, Flutter

### Other skills

Leadership

Time management

Decision-making

Organizational and Excellent Planning skills

Concept Development

Problem solving (problem analysis)

Teamwork

Analytical skills

Creativity