

# Seyed Hassan Hosseini

### Profile

A dedicated software developer and PhD studnet in transportation and traffic, with over 3 years of experience in helping companies develop user-friendly web applications.

### Education

# PhD student, Sapienza university (Transport System Engineering), Rome

September 2021 — October 2024

Transport mode detection and trip phase recognition via mobile sensors. Applying deep and machine learning models.

## PhD Mobility, Luxembourg University, Luxambourg

June 2023 — December 2023

Working with Google Popular time to predict charging stations demand

# Master trainship, Centrum Wiskunde & Informatica (CWI), Amsterdam

June 2021 — October 2021

Machine and deep learning projects for Amstertham parking projects.

# Erasmus plus trainship, Technische Universität Berlin - TU Berlin, Berling

March 2021 — June 2021

Applying machine learning models for green transport and writing proposals for Erasmus projects

### Master course, University of Žilina, Žilina

September 2019 — December 2019

Master course for working with big train data

# Master of Science in Transportation, Sapienza University, Roma September 2018 — May 2022

Online urban transport mode detection via machine and deep learning models. Average: (110 out of 110).

#### WORK EXPRIENCE

#### React and React Native Developer at Movesion, Roma

May 2022 — January 2024

Developing web and mobile application software in logistic and mode detection

### Front End Developer at PTV Group, ROMA

June 2022 — January 2023

#### **Details**

Rome

Italy

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Date / Place of birth

March 3, 1989

Aliabad

Nationality

Iranian

#### Links

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#### **Skills**

JavaScript, CSS, HTML

React and ReactNative

Devops and Restful Api

MySQL, PostgreSQL, Microsoft SQL Server, MongoDB

NodeJs, Restful Api

**Javascript Machine Learning** 

Git and GitHub

Docker and react unit test

TypeScript and Python

Neural Network, TensorFlow, Keras, , CNN, RNN

#### Languages

English

Italian

Persian

#### **Hobbies**

Swimming and playing guitar

 Developing and optimizing a web application using React, Angular Js, and working with other developing tools including HTML/CSS, JavaScript, and databases that allowed users to monitor urban traffic.

### Full Stack Developer at Movesion, ROMA

October 2021 — May 2022

- Developing a responsive web application using JavaScript,
  TypeScript, HTML, and CSS allowing users to schedule logistics
  products and Mobile applications with react native.
- Developing a web API using Node.js, MongoDB, and Firebase as a database and TensorFlow javaScript machine learning.

# Full Stack mobile and web application at Imigration Company, Roma

2020 — February 2021

Developing mobile and web applications working with Xamarin framework (C#) with machine and deep learning API and MySQL as a database.

# Machine and Deep Framework Developer at Sapienza uNIVERSITY, Roma

January 2022 — December 2023

Developing web applications with machine learning background

### **★** Publication

- 1. Hosseini, Seyed Hassan, and Guido Gentile. "Smartphone-Based Recognition of Access Trip Phase to Public Transport Stops Via Machine Learning Models." Transport and Telecommunication Journal 23.4 (2022): 273-283.
- 2.Hosseini, Seyed Hassan, et al. "Inferring Station Numbers in Metro Trips Using Mobile Magnetometer Sensor via an Unsupervised K-means Clustering Algorithm." 2023 8th International Conference on Models and Technologies for Intelligent Transportation Systems (MT-ITS). IEEE, 2023.
- 3.S.Hosseini, S. Pourkhosroa, G. Gentile, L. M. B. Miristice,, "GPS-Based Trip Phase and Waiting Time Detection to and from Public Transport Stops Via Machine Learning Models". 25th Euro Working Group on Transportation Meeting (EWGT 2023). (Presented)
- 4.S.Hosseini, S. Pourkhosroa, L. M. B. Miristice, F. Viti, G. Gentile. ,Automated Passengers Trip Phase Recognition and Public Transit Accessibility Level Analysis via Machine Learning Models Using GPS Data, The 103rd Transportation Research Board (TRB) Annual Meeting, January 7–11, 2024.
- 5.S.Hosseini, G. Gentile, L. M. B. Miristice, F. Viti, "Deep Learning-Based Approach to Recognize Passengers Transport Mode and Trip Phases ",24 EEEIC International Conference on Environment and Electrical Engineering & 8 I&CPS Industrial and Commercial Power Systems Europe, June 17-20, 2024. (Presented)

6.S.Hosseini, S. Pourkhosroa, L. M. B. Miristice, F. Viti, G. Gentile., "Deep Neural Networks for Identifying Modes of Transport using GPS Data", Conference in Emerging Technologies in Transportation Systems (TRC-30), September 2-4, 2024, Greece. (Presented)

# Qualification

- 1.Patenting nine inventions in the fields of Transportation engineering, mechanic engineering, electronic and computer engineering (2007 to present) Certification for the finalist of Artificial Intelligence in the Europe challenges among 19 countries
- 2.Intelligent alarming gadget to protect (cyclists, pedestrian and kids, scooters, blind, and disabled people) of urban accidents on the night (2019)
- 3.Inventing Vehicle and animal detection system at U-turns and T-junctions using PIR sensors and laser

### **★** Awards

- 1.Best Paper in the 22nd International Multi-Conference Reliability and Statistics in Transportation and Communication
- 2.Gold medal of Germany Festival of inventions for Intelligent alarming gadget to protect (cyclists, pedestrian and kids, scooters, blind, and disabled people) of urban accidents on the nights (Nuremberg, November 2019) YouTube Link: https://youtu.be/-Dm9BCfiPZM
- 3.Special Prize and the best invention (Nuremberg, November 2019) Gold medal of Switzerland Festival of inventions for Smart Shopping Cart for the Blinds among 700 inventers
- 4.Gold medal of South Korea Festival of inventions for Smart Shopping Cart for the Blinds (Seoul, November
- 5. Winner for presenting at Scientific speech at Tor Vergata University at Rome (March-2019)
- 6. Winner for the European Project (Erasmus) -2018
- 7. The rank is between the first 10 top student of 80 students in the flied of Transportation Engineering at Sapienza University of Rome.

#### **★** Grant

- 1.Erasmus+ grant for Traineeship at Technical University of Berlin (2021)
- 2. Erasmus grant for master degree at Sapienza university of Rome (2019)
- 3. Financial supports from Payam Noor University in bachelor degree

## **★** Interest

- 1.Developiing web application and software
- 2. Artificial Intelligence (Machine and Deep Learning Models)
- 3.Urban Transport Mode Detection via Mobile Phones

# **◄** References

Guido Gentile from Professor of Transport Engineering at DICEA,-Sapienza Università di Roma

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Francesco VITI from Head of the MobiLab Transport Research Group Head of the Computational Engineering and Sciences Institute Department of Engineering (DoE), Faculty of Science, Technology and Medicine (FSTM)

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