# **Curriculum Vitae**

# Alireza Taheri Tajar

M.Sc. graduated in Electrical and Control Engineering and over 4 years' startup funding experience in Intelligent Transportation systems and UAVs. Seeking Phd position related to Artificial Intelligence concepts and fabrication in this field.

Graduate Student

Mail address: taheritajar.alireza@gmail.com

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Phone number: +98-(936) 856-4342

#### **Education**

#### • Master of science Bu-Ali Sina University, Hamedan, Iran

(Sep 2016 - Sep 2019)

**Faculty of Engineering** 

Department of Control Engineering

M.Sc. Thesis: Counting, Classifying and Detecting the Speed of Passing Vehicles from One

Axis based on Image Processing **Supervisor:** Dr. Abbas Ramazani

Total GPA: 15.63 out of 20, Thesis Grade: Excellent

# • Bachelor of science Bu-Ali Sina University, Hamedan, Iran

(Sep 2012 - Sep 2016)

Faculty of Engineering

Department of Electrical Engineering

**B.Sc. Thesis:** Designing and fabrication a multirotor drone

**Supervisor:** Dr S. Mohammad Reza Tousi

Total GPA: 15.97 out of 20, Thesis Grade: Excellent (Top Student)

#### Research Interests

- **★** Artificial intelligence
- **★** Image processing
- ★ Deep learning
- ★ Intelligent transportation systems
- ★ Unmanned Aerial Vehicle

## Work Experience

• **Technical Manager** Sina ATI NET, Hamadan, Iran (<u>www.atisense.ir</u>) Jan 2016 to Mar 2020

- \* Electronic project
- \* Intelligent Transportation System (ITS)
- \* Internet of Things

# Co-Founder and Technical Manager Atitek Faradid Pars, Hamedan, Iran (www.atitek.ir)

\* Manufacturing of UAVs and services (Photogrammetry and Aerial mapping)

# **JOURNAL PAPERS**

Taheri Tajar, A., Ramazani, A., & Mansoorizadeh, M. (2020). A lightweight Tiny-YOLOv3 vehicle detection approach. *Journal of Real-Time Image Processing*.

Under revision

Jan 2015 to

Sep 2018

Award and Honors	<ul> <li>Head of Student Entrepreneurship Union, Ministry of Science and Research</li> </ul>	2019
	Head of Entrepreneurship Student Committee, Bu-Ali Sina University, Hamedan, Iran	2018
	Top Bachelor student award of Bu-Ali Sina University	2016
	<ul> <li>Member of the Executive Committee of the 14th Alumni Conference of Festival of Nations</li> </ul>	2016
	<ul> <li>Admitted for pursuing graduate studies at Bu-Ali Sina University in fall 2016 without entrance examinations (Only granted to 10% top students)</li> </ul>	2016
	<ul> <li>Ranked as top 2.5% amongst 120 students of Electrical Engineering Faculty of Bu-Ali Sina University.</li> </ul>	2016
	<ul> <li>Head of Electrical Student Committee, Bu-Ali Sina University, Hamedan, Iran</li> </ul>	2015
	<ul> <li>Head of Robotic Student Committee, Bu-Ali Sina University, Hamedan, Iran</li> </ul>	2014
	<ul> <li>Bu-Ali Sina University Award as an Exceptionally Talented student</li> <li>Coordinator of 1st Conference of Industry Relationship with University, Hamedan, Iran</li> </ul>	2014
	<ul> <li>Member of Execution Committee of National Spaghetti Bridge Contest, Bu-Ali Sina University, Hamedan, Iran (Considered as a Green Competition)</li> </ul>	2013
	<ul> <li>Member of Executive committee of the 2th Bu-Ali Sina Kooshk-Kaghazi Festival</li> </ul>	2013
	<ul> <li>Member of Executive committee of the 2th Bu-Ali Sina Save the Eggs Festival</li> </ul>	2013
LANGUAGE SKILLS	English – TOEFL exam scheduled for November 29, 2020     Forsi (Porsian) Notice profision sy	

Farsi (Persian) - Native proficiency

# **Teaching Experiences**

**Teaching:** Computer basics (Madani High School)

(Sep 2013 - Jan 2015)

# Skills and Expert

#### **Programming languages:**

Python C/C++ MATLAB C#, HTML, CSS

#### Frameworks:

Tensorflow, Keras, OpenCV, Django

## Microcontroller and Developer Kit skills:

AVR, ARM (LPC and STM) Raspberry PI, Arduino **NVIDIA Jetson Nano** 

#### **Softwares:**

Linux Docker Git

Microsoft Office, EndNote, Latex

CodeVision AVR, Keil uvision, Altium Designer

#### **Patents**

- I.R. 139550140003003919: 'Smart drone with the ability to spray toxins with a variable arrangement of sprays', June 23, 2016
- I.R. 139850140003008739: 'Apparatus for counting and classifying vehicle using a combination of wireless magnetic sensors and inductive loops', September 27,2020
- I.R. 139850140003008741: 'Intelligent remote control robot for cleaning hemispherical CCTV cameras', September 27,2020

# Accomplished and Academic Projects

- RESTful Applications Development on Face and Object Detection with YOLOv3 (2020)
- Applications Development on **Vehicle Detection** with YOLOv3 (2019)
- Designing and fabrication a magnetic sensor vehicle detector. (2016)
- Designing and fabrication an inductive loop vehicle detector. (2015)
- Designing and fabrication **a multirotor drone for photogrammetry and mapping**. (2015)
- Designing and fabrication **Mine Detector robot** (2014)
- Designing and fabrication line follower robot (2013)

### Hobbies

Persian poetry, Management books, technology and startups, Taekwondo

# Academic References

Dr. Abbas Ramazani

Bu-Ali Sina University

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a.ramezani@basu.ac.ir

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Dr Muharram Mansoorizadeh

**Bu-Ali Sina University** 

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• Dr. Hossein Torabzadeh

Bu-Ali Sina University

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• More references are available upon request