MOHAMMAD ALI ZARRIN ZADEH

+98 9152222736
ali.zarrinzadeh@gmail.com
LinkedIn GitHub

WORK EXPERIENCE

WeBlast Ltd Frankfurt, Germany (Remote)
Back-End Developer *April 2018 - Present*

. Development and maintenance of back-end applications using Django (Python).

. Leadership of the Back-End team.

. Custom solution design for online stores.

. Management and enhancement of payment flows.

. Application development for kids' education.

Signal Processing Lab At SUT Mashhad, Iran
Machine Learning Software Engineer *March 2021 - Present*

. Real-time object detection application development.

. Traffic analyzer tool creation.

. Inference pipeline implementation and optimization.

. Application development for the Nvidia Jetson Platform.

. Back-End Development

EDUCATION

Sadjad University Of Technology *2017 - 2021*
B.S. in Computer Engineering **GPA: 3.72/4.0** (18.01/20.0)

. *Thesis:*

. Game Controller based on Gesture with SVM

National Organization for Development of Exceptional Talents (NODET) *2012-2016*
Diploma of Mathematics and Physics

SKILLS

Programming Languages:
Python, C/C++, JavaScript. *Basic*: Matlab, C-Sharp, Java, HTML, CSS

Tools/Frameworks:
Django, CPython, Linux, Docker, CI/CD, Git, Arduino, Pandas, Docker, Darknet, Gstreamer, Opencv, Nvidia Jetson, NodeJS, Nest, Cmake, Numpy, Matsim.

Other skills: Problem Solving, Algorithmic Thinking, Team Work

LANGUAGES

English: Professional Working Proficiency

- *IELTS Academic: Overall 7*

Persian: Native

INTERESTS

- **Software Engineering**
- **Machine Learning And AI**
- **Natural Language Processing**
- **Image processing and Computer Vision**

HONORS

- Top Student of the Graduating Class, Sadjad University of Technology
. *Ranked within the top 5% of the graduating class.*
. Top student of the 2017 B.Sc. program.

- Member of the ACM Team, Sadjad University of Technology
. *Achieved twenty-fourth place in the 2020 ICPC Asia Tehran Regional Contest.*

- University-Selected Student for National Olympiad
. *Qualified for final contest*

ACADEMIC PROJECTS

Vision based Traffic Analyzer For Mashhad Transport and Traffic Organization
Full implementation of a real-time and always-on system for vehicle detection and traffic Analyzing using edge technologies under supervision of **Dr.Behzad Bakhtiari**. Project developed using YOLOV4 Deep network for inference, Tensorrt, Gstreamer, Deepstream, Opencv and MQTT on nvidia Jetson platform.

Game Controller based on Gesture with SVM
Developing low cost game controller based on Gesture/Motion using MPU6050(gyro) and ESP8266 wifi module. gestures are trained and modeled by SVM. And developing a demo game with Unity.

Open Source CPython packages for PyPI
Object Tracker using SORT algorithm .
Package for mathematical line operations .

Implementation of an AI challenge(Competition) server
Implemented using Python and tkinter. Server simulates and displays a board game(Quoridor) playing by AI clients.

Persian Word Recognition
Training a model using HMM for Recognition of some Persian words.

Simple Script Interpreter
A simple interpreter written in C++ using OOP;

TEACHING ASSISTANT

Internet of Things — Sadjad University Of Technology
- *Dr.Bakhtiari* — *Spring 2021*

Linear Algebra — Sadjad University Of Technology
- *Dr.Aminian* — *Fall 2020*

Algorithm Designing — Sadjad University Of Technology
- *Dr.Salkhordeh* — *Fall 2019*

Data Structures — Sadjad University Of Technology
- *Dr.Bakhtiari (twice)* — *Fall 2019, Spring 2020*

Advanced Programming — Sadjad University Of Technology
- *Dr.Yazdanjoo* - *Engr.Yazdanian* — *Fall 2018, Fall 2020*

Fundamentals of Programming — Sadjad University Of Technology
- *Engr.Yazdanian* - *Dr.Shamsaee* - *Dr.Rajaee* — *Summer 2018, Fall 2018*

ONLINE COURSES

Machine Learning
Andrew Ng, Stanford online by Coursera
Machine Learning Course tutorial by Stanford online in Coursera.com.

Neural Networks and Deep Learning
Andrew Ng, Deeplearning.ai by Coursera
Through five interconnected courses, learners develop a profound knowledge of the hottest AI algorithms, masteringdeep learning from its foundations (neural networks) to its industry applications (Computer Vision, Natural LanguageProcessing, Speech Recognition, etc.)

- References, Further Information and Proofs are available upon request