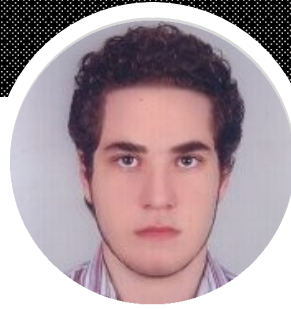# Sepand Haghighi

Data Engineer

DoB : 1993/3/9 ■ ■ Marital Status : Single

✉ sepand@pycm.ir

📱 (+98)9112340853

💡 Skills

Linux

Python

C/C++

MATLAB

Javascript

HTML

CSS

Microsoft Office

Altium Designer

Basic Programming Language

Electronic Board Design

🎓 Education

Master of Computer Engineering | 2016 - 2019

Branch: Computer Architecture
Institute/University: Sharif University of Technology
GPA : 15.14
Thesis : A Hardware-Software Partitioner for Deep Learning Algorithms

Bachelor of Electrical Engineering | 2011 - 2016

Branch: Digital Electronic
Institute/University: Amirkabir University of Technology
GPA : 15.29
Thesis : Design a Logic Recommender System for Optimization of Digital CMOS Integrated Circuits by Means of Computational Intelligence Algorithms

Diploma of Mathematics | 2007 - 2011

Institute/University: National Organization for Developing Exceptional Talents
GPA : 18.40

💼 Work Experiences

Data Engineer | From 2018

Institute: ECSIM Open-Source Organization

CTO | 2017-2020

Company : AppKetab

CTO | 2016 - 2018

Company : Moduland

Intern | 2015 - 2016

Institute: Photonic Research Lab (Amirkabir University of Technology)

Electronic System Engineer | 2011 - 2015

Institute : Marlik Institute of Innovation and Technology

Proteus

AVR Microcontroller

R Programming Language

Machine Learning

Ruby

Image Processing

🌐 Languages

English

Reading Level ● ● ● ● ●

Writing Level ● ● ● ● ○

Listening Level ● ● ● ● ●

Speaking Level ● ● ● ● ○

🔍 Research Interest

Machine Learning

Deep Learning

Open-Source Software

Digital Electronics

Image Processing

Neural Networks

🌐 Social Network

in sepand-haghighi

⊙ Sepkjaer

● Sepkjaer

○ sepandhaghighi

RG Sepand_Haghighi

≡ Certificates

Data Science Specialization `2015`

Institute : Johns Hopkins Bloomberg School of Public Health

Grade : 95.8 / 100

🔬 Publications

Experimental dataset of electrochemical efficiency of a Direct Borohydride Fuel Cell (DBFC) with Pd/C, Pt/C and Pd decorated Ni–Co/rGO anode catalysts `April 2020`

Publisher : Chemarxiv

Link :

https://chemrxiv.org/ndownloader/files/22387623

Dataset of standard tests of Nafion 112 membrane and Membrane Electrode Assembly (MEA) activation tests of Proton Exchange Membrane (PEM) fuel cell `February 2020`

Publisher : Chemarxiv

Link :

https://chemrxiv.org/ndownloader/files/21827175

A Hardware-Software Partitioner for Deep Learning Algorithms (in Persian) `September 2019`

Publisher : Sharif University of Technology

OPEM: Open Source PEM Cell Simulation Tool `July 2018`

Publisher : Journal of Open Source Software

Link :

joss.theoj.org/papers/10.21105/joss.00676

PyCM: Multiclass confusion matrix library in Python `May 2018`

Publisher : Journal of Open Source Software

Link :

joss.theoj.org/papers/10.21105/joss.00729

Pyrgg: Python Random Graph Generator `July 2017`

Publisher : Journal of Open Source Software

Link :

joss.theoj.org/papers/10.21105/joss.00331

Smart Sound Pressure Level Monitoring System (in Persian) `August 2016`

Publisher : Iran, Certificate of Grant of Patent

Registration No.:90993

Hospital Smart Management System `Jan 2016`

Publisher : Iran, Certificate of Grant of Patent

Registration No.:87986

Damash 2013 Soccer 2D Simulation Team Description Paper

March 2013

Publisher : RoboCup 2013 Symposium and Competitions

Smart Pen

May 2011

Publisher : Iran, Certificate of Grant of Patent

Registration No.:70380

Optical Egg Tester

June 2009

Publisher : Iran, Certificate of Grant of Patent

Registration No.:59214

AVR Wireless Programmer With Ability of Encoding

July 2009

Publisher : Iran, Certificate of Grant of Patent

Registration No.:59831

✎ Projects

ART

2018

Python library for text converting to ASCII art fancy

Link :

https://www.4r7.ir

PyCM

2018

Multi-class confusion matrix library in Python

Link :

https://www.pycm.ir

OPEM

2018

Open-Source PEM fuel cell simulation tool

Link :

https://opem.ecsim.ir

PyRGG

2017

Python random graph generator

Link :

https://www.pyrgg.ir

Orangetool

2017

General and useful python-scripts developed for Single-Board computers

Link :

https://www.orangetool.ir

Plastic Surgeries Outcome Assessment Software

2016

An automatic questionnaire system that developed for a breast surgery research (but it can be used for any other plastic surgeries)

⚇ Achievements

Ranked 28th in National Master Entrance Exam — 2016

Achieving the 3rd Place in 11th Khwarizmi Youth Award,Field of Electrical and Electronic Inventions,Awarded by President,Ministry of Science,Research and Technology and Ministry of Education,Tehran,Iran — 2009

Achieving the 4th Place in 11th Khwarizmi Youth Award,Field of Electrical and Electronic Inventions,Awarded by President,Ministry of Science,Research and Technology and Ministry of Education,Tehran,Iran — 2009

Achieving the 5th Place in Junior Soccer 1 * 1 League,IranOpen2009,Iran,Qazvin,With MirzaKoochakkhan High School Team,"DIZ " — 2009

Achieving the 3rd Place in "Fekre Bartar" Guilan Science and Technology Park Idea and Invention Competition,Ministry of Science,Research And Technology — 2008

Achieving the 10th Place in Junior Extra Path Finder League,IranOpen2007,Iran,Tehran,With MirzaKoochakkhan High School Team,"Speedo" — 2007

Achieving the 1rd Place in Junior Extra Path Finder League,Helli Robosaz,Iran,Tehran,With MirzaKoochakkhan High School Team,"Speedo" — 2006

☝ Teaching Experience

Teaching Assistant (Python Programming) — 2019

Dr. Hossein Hadian - Sharif University of Technology

Teaching Assistant (C++ Programming) — 2013

Dr. Ali Pourmohammad - Amirkabir University of Technology

Teaching (Introduction to Machine Learning) — 2012

Salam High School Festival – Tehran

Teaching (AVR Microcontroller) — 2012

MirzaKoochakkhan High School , Rasht

🎓 Selected Courses

Linear Algebra (19.5/20)

Microprocessor and System Interface (18/20)

Logic Circuits and Digital Design (18.21/20)

Analog Communication (18.5/20)

Multimedia Systems (19.5/20)

Electronic Measurements (19/20)

Research Methods (20/20)

Computer Programming (19.3/20)

Advanced Programming (17.5/20)

Hardware Security and Trust (19/20)

Green Computing (17.9/20)

On-Chip Communication (17.4/20)

Practical Machine Learning (100/100)

Regression Models (100/100)

R Programming (100/100)

Statistical Inference (85/100)

Exploratory Data Analysis (95/100)

Machine Learning (100/100)

Neural Network for Machine Learning (87/100)

👤 References

Dr. Shaahin Hessabi

Associate Professor – Sharif University of Technology

Email: hessabi@sharif.edu

Dr. Ali Pourmohammad

Associate Professor – Baku Higher Oil School

Email: pourmohammad@bhos.edu.az

Dr. Masoomeh Jasemi

Researcher – University of California Irvine

Email: mjasemi@uci.com

Dr. Reza Vatani

Researcher – Old Dominion University

Email: rvata001@odu.edu

Dr. Hossein Hadian

Researcher – Sharif University of Technology

Email: hadian@ce.sharif.edu