

Kasra Korminejad

Mashhad, Iran

✉ korminejad.kasra@gmail.com 🏠 kasrkn.github.io 💻 kasrkn 🔗 kasra-korminejad

Education

B.Sc. in Computer Engineering

Mashhad, Iran

FERDOWSI UNIVERSITY OF MASHHAD

Sep 2016 - Sep 2021

- Thesis: Developed a GIS tool for analyzing the geographic data based on the reachability map of a city to help make management decisions in optimizing access to landmark urban locations in smart cities.

High & Middle School Diploma

Mashhad, Iran

NODET (NATIONAL ORGANIZATION FOR DEVELOPMENT OF EXCEPTIONAL TALENTS)

Sep 2009 - June 2016

- ShahidHasheminezhad High School, Mashhad.

Research Interest

- Machine Learning
- Deep Learning
- Computer Vision
- Bioinformatics
- Data Mining
- Cloud Computing
- Distributed Systems

Research Experience

Research Assistant

Sep 2020 - Sep 2021

COMPUTER ENGINEERING DEPARTMENT, FERDOWSI UNIVERSITY OF MASHHAD

- Developed an algorithm for finding tandem repeats in genome sequences much faster than other available methods.
- Collaborated with a team from Science and Technology at Stanford Healthcare Innovation Lab.
- Under the supervision of Prof.Naghibzadeh and Dr.Bahmani

Research Assistant

Aug 2020 - till present

COMPUTER ENGINEERING DEPARTMENT, FERDOWSI UNIVERSITY OF MASHHAD

- Developing a method for analyzing the geographic data based on the reachability-map of a city to help make management decisions in optimizing access to landmark urban locations in smart cities.

Selected Projects

Radwin Medical Software

June 2017 - Oct 2017

CEO & DEVELOPER (PART OF TEAM)

- Radwin is a desktop application for specialist physicians in which they can customize their requirements for visiting patients in special medicines or a special range of diseases.
- It was developed in JAVA programming language.

Home automation platform, for calculating the pattern of energy consumption.

Dec 2018

DEVELOPER (PART OF TEAM), UNDER SUPERVISION OF PROFESSOR. YAGHMAEI

- Developed a system based on machine learning models to predict the power consumption pattern of each home in Mashhad.
- The objective of this project was to give the clients, which consume excessively a way of reducing energy usage.

Airport trolley management system

Jan2020 - Jun 2020

DEVELOPER (PART OF TEAM)

- TMS is an IoT project with a mobile application for managing and tracking the trolleys of the airport, which helps passengers find trolleys as fast as possible. Also, it can help the staff to manage and track each trolley and its status.
- Each trolley connects to an edge server using BLE and LoRa protocols.
- This project was done alongside my Internet of Things(IoT) Course under supervision of Professor M.Kahani.

Honeypot

Jun 2020

DEVELOPER

- This program was developed to detect malicious actions and stop them automatically using the Snort tool, or manually using the management panel, in order to prevent the intruders from accessing the main part of the system.
- This project was done alongside my Fundamental of Information Security Course under supervision of Dr. H.Amintoosi

Educational Blockchain System

Nov 2020 - Jan 2021

DEVELOPER

- EBS is a blockchain system written in Python and Java for educational purposes. The primary purpose of this project was to teach students how algorithms can be used in large systems. Also, students can learn how decentralized systems like blockchain works.

E-shop sales pattern discovery

Jun 2020

DEVELOPER

- Finding frequent sales patterns on Digikala's (biggest e-shop in Iran) datasets.
- Clustering the type of users based on their purchasing patterns.
- Analyzing and clustering the sales in each city to predict the feature purchases by each group of users.

Online food ordering system

Nov 2020 - Jan 2021

DEVELOPER

- A software with microservices architecture which was developed alongside my cloud computing course under the supervision of dr.Abrishami
- Developing this project based on microservices architecture and deploying their services using docker containers was the primary goal of this project.

Reachability GIS-Map Software

Sep 2020 - Sep 2021

DEVELOPER

- Web-based GIS software was developed to help make management decisions in optimizing access to landmark urban locations in the smart city

Teaching Experience

Lab Instructor, *Computer Foundation and Programming* by Dr.E.Fazlersi, Ferdowsi University of Mashhad

Jan 2021 - Jul 2021

Head Teaching Assistant (4 semesters), *Design of Algorithms* by Prof.M.Naghibzadeh, Ferdowsi University of Mashhad

Jan 2019 - Jul 2021

Head Teaching Assistant (5 semesters), *Operating Systems* by Dr.M.Allahbakhsh, Ferdowsi University of Mashhad

Jan 2019 - Jul 2021

Teaching Assistant (graduate course), *Cloud Computing* by Dr.S.Abrishami, Ferdowsi University of Mashhad

Jan 2021 - till present

Teaching Assistant, *Foundations of Information Security* by Dr.H.Amintoosi, Ferdowsi University of Mashhad

Jan 2021 - Jul 2021

Teaching Assistant, *Electrical Circuits* by Prof.H.Pourreza, Ferdowsi University of Mashhad

Sep 2018-Jan 2019

Teaching Assistant, *Discrete Mathematics* by Dr.K.Ghiasi Shirazi, Ferdowsi University of Mashhad

Jan 2018 - Jul 2018

Publications

In Submission Process

- M.Naghizadeh, **K.Korminejad**, V.Krishnan, A.Bahmani. A Novel Millipede Algorithm to Discover all Tandem Repeats in One Scan of DNA. Submitted to Bioinformatics journal

Work Experience

Advanced Technologies Incubator Centre Ferdowsi University of Mashhad

Mashhad, Iran

UI/UX DESIGNER

Aug 2017 - Feb 2017

- contributed to implement a website for the purpose of trading jewelry, industrial materials and industrial machines.

Mayatech, Innovation and business Factory

Mashhad, Iran

SOFTWARE ENGINEER

June 2019 - Sep 2019

- Developed a web crawler for extracting data about the startups in Iran and analyzing them in order to implement an Iranian startups recommender system.
- Developed a Telegram messenger bot using the Flask framework in which the world news is collected from the users' reports.

Dezigno

Mashhad, Iran

Co-FOUNDER & CTO

Sep 2020 - Aug 2021

- Dezigno is a print-on-demand service aiming to ease the process of selling merchandise to a plug-and-play means for Iranian content creators

Extracurricular Activity

Ferdowsi Distributed Systems Lab

Mashhad, Iran

UNDER SUPERVISION OF PROFESSOR NAGHIZADEH

2020 - 2021

- Working on finding some algorithms which can be used in finding tandem repeats in genome sequences.

Ferdowsi Scientific Society of Computer Engineering

Mashhad, Iran

MEMBER

2017 - 2020

- Gained expertise in a lot of field work such as throwing conferences, etc.

Ferdowsi society of Linux Users Group(LUG)

Mashhad, Iran

MEMBER

2018 - 2019

- Gained expertise in a lot of field work such as throwing conferences about open source community and Linux operating system.

FUM collegiate programming contest (ACM)

Mashhad, Iran

TECHNICAL STAFF

Dec 2019

- gained experience in holding great events and teamwork in big teams.

Honors & Awards

2010 **3rd Place**, National Students Robocup Marathon in Manual Soccer Player Robots.

Isfahan, Iran

2011 **4th place**, Students Robocup Marathon of Khorasan Province in Manual HeavyFighter Robots.

Mashhad, Iran

Selected Courses

| Course | Grade |
|--|----------|
| Artificial Intelligence Expert systems | 18.3/20 |
| Signals and Systems | 18.86/20 |
| Information retrieval and web search | 19.20/20 |
| Foundation of Computational Intelligence | 19.25/20 |
| Foundation of Information Security | 19.88/20 |
| Cloud Computing (graduate course) | 20/20 |
| Algorithms and Complexity | 20/20 |
| Foundation of Internet of Things | 20/20 |
| Compiler design fundamentals | 20/20 |
| Foundation of Computer Vision | 20/20 |
| Foundations of Data Mining | 20/20 |

Skills

Programming Languages

- C/C++ - Python - JavaScript - JAVA - MATLAB
Linux Shell Programming - SQL - PHP
- VHDL - Verilog
- HTML - CSS

Frameworks and Libraries

- **Python** : Django - Flask - Scrapy - OpenCV - PyQt - PyGame
- **Java** : Cloudsim - Apache Lucene
- **JavaScript** : ReactJS

Database

- MySQL - SQLite - SQL Server - PostgreSQL - MongoDB

Operating Systems

- Linux - Windows

Other related Technologies

- Docker
- Git
- **Network Analysis Software** : Wireshark
- **Hardware Programming** : Raspberry Pi programming
STM32 ARM microcontrollers - Arduino microcontrollers - AVR
- **Hardware Simulation tools** : Proteus
- **Graphics editor** : Adobe Photoshop - Adobe Premiere

Language

- Persian: Native
- English: Fluent