Alireza Afzal Aghaei

junior programmer

I've started coding at 17 by designing web pages. After applying for university, I switched to desktop application programming, particularly with Python in both automating daily tasks and educational settings. Along with Python, I learned C, C++, C#, and Matlab. Since the 3rd year of university, I migrated from Windows to GNU/Linux operating systems. Currently, as an M.Sc. student, I'm studying machine learning methods and developing them in mathematical applications.

Personal info

Address
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E-mail
alirezaafzalaghaei@gmail.com

Date of birth
07 Jun 1996

Marital status
Single

Military status
Educational Exemption

LinkedIn
linkedin.com/in/afzalaghaei

GitHub
github.com/alirezaafzalaghaei

Gitlab
gitlab.com/alirezaafzalaghaei

Stackoverflow
stackoverflow.com/users/4348709

Quera
quera.ir/profile/alireza25

Telegram
t.me/conficker

Experience

Oct 2018 – Nov 2018 **Teacher Assistant**
Shahid Beheshti University
Fundamentals of programming

Sep 2015 – Mar 2018 **Teacher Assistant**
Damghan University
Fundamentals of programming, Advanced programming, and Data structures

Education

Jan 2021 – present
School of Data Science and Computer, Shahid Beheshti University, Iran
Ph.D, Computer Science

Sep 2018 – Sep 2020
School of Data Science and Computer, Shahid Beheshti University, Iran
Master of Science, Computer Science, Scientific Computation. Outstanding student, Superior grade 19.19

Thesis: Extending machine learning algorithms for solving Fredholm integral equations, Supervised by Koroush Parand

Sep 2014 – May 2018
School of Mathematics and Computer Science, Damghan University, Iran
Bachelor of Science, Computer science. Outstanding student, Superior grade 19.35

Thesis: Solving Fredholm integral equations of the second kind using parallelized modified cuckoo optimization algorithm, Supervised by Hassan Dana

Publications

A new approach to the numerical solution of Fredholm integral equations using least squares-support vector regression
K. Parand, A.A. Agahei, M. Jani, A. Ghodsi
Mathematics and Computers in Simulation

Skills

Python
Python 3.x, built-in and scientific modules

GNU/Linux
Ubuntu, Manjaro, KDE desktop

Evolutionary Algorithms
GA, COA, and SA

Parallel Computation
Familiar with OpenMP, MPI, Cuda

Other skills

Matlab, Maple
Basic knowledge

Web Design
HTML, CSS, JavaScript, JQuery, Ajax

PHP
Basic knowledge, Telegram Bot

Databases
Basic knowledge of MySQL, SQLite, Redis

Django, Sanic

Basic knowledge about Django MVT and Sanic's asynchronous WebSocket programming

C#

Basic knowledge

Current studies

Machine learning and Deep learning

Using Deep learning techniques for solving real-world problems

Scientific computation

Integral Equations, Numerical analysis, and numerical linear algebra

Projects

Parallel Cuckoo Optimization Algorithm

Implementation of Parallel COA in C++ [Source Code]

Keratoconus Detector

Detecting Keratoconus disorder using machine learning and deep learning algorithms

Web-Based music player

A simple web-based music player for a local network [Source Code]

RSS Reader Chrome Extension

Replace Chrome's new page tab with the latest news [Source Code]

Electronic Election System

An Electronic Election System written in Django [Source Code]

Languages

Persian

Native

English

Level B1

References

Kourosh Parand

Professor of Scientific Computing, Shahid Beheshti University, Department of Computer Science

k_parand@sbu.ac.ir

Hassan Dana

Lecturer at school of mathematics and computer science, Damghan University

dana@du.ac.ir

Yasin Alipour

In Chair of IT Department at Damghan University

alipour@du.ac.ir