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
Boys Dormitory, Daneshju Blvd, Velenjak, Tehran, Iran

E-mail
alirezaafzalaghaei@gmail.com

Marital status
Single

LinkedIn
linkedin.com/in/afzalaghaei

Gitlab
gitlab.com/alirezaafzalaghaei

Quera
quera.ir/profile/alireza25

Phone
+98 937-622-4365

Date of birth
07 Jun 1996

Military status
Educational Exemption

GitHub
github.com/alirezaafzalaghaei

Stackoverflow
stackoverflow.com/users/4348709

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

Sep 2018
present

School of Data Science and Computer, Shahid Beheshti University, Iran

Master of Science, Computer Science, Scientific computation

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

● ● ● ○ ○

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

● ● ○ ○ ○

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