

Zahra Dehghanian

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RESEARCH INTERESTS

- Language-based Security
- Formal Methods of Information Security
- Programming Languages
- Malware Detection Algorithm
- Compiler Design

EDUCATION

Amirkabir University of Technology, Tehran, Iran

- B.S. in Computer Engineering, GPA: 17.84 / 20 Total Passed Credits: 80 Sep 2015 – Sep 2019

Farzanegan 2 (NODET), Tehran, Iran

- Diploma in Mathematics and Physics Discipline, GPA: 19.92/20 2010– 2015

HONORS & AWARDS

- Achieved top 0.3 % place among all applicants for the University Entrance Nationwide Exam (Approximately 180,000 applicants) in Mathematics 2015
- Achieved top 0.5 % place among all applicants for the University Entrance Nationwide Exam (Approximately 108,000 applicants) in Foreign Languages (English). 2015
- Semi-finalist at National Mathematics Olympiad 2013
- accepted for 2nd level of National Kharazmi awards assessments 2011
- Achieved 1rd Place in 7th National Javan Kharazmi awards assessments 2009
- Achieved 3rd Place in 6th National Javan Kharazmi awards assessments 2008
- Member of National Organization for Development of Exceptional Talents (NODET) 2010 – 2014

TEACHING EXPERIENCE

Teaching Assistant ,Discrete Mathematics

Spring 2016

Amirkabir University of Technology ,Under Supervision Of Prof. Fallah

Instructor ,Advanced Programming in JAVA

Fall 2017

Farzanegan 2 high school

Instructor ,Basic Principles of Computer Programming in C++

Fall 2016

Farzanegan 2 high school

LANGUAGES

- Persian: Native language.
- English: Fluent (speaking, reading, writing).

SKILLS

•Programming

- C and C++ (Mastering Degree : 8/10)
- Java (Mastering Degree : 8/10)
- Python 3 (Mastering Degree : 5/10)
- VHDL (Mastering Degree : 6/10)
- verilog (Mastering Degree : 6/10)
- Assembly (Mastering Degree : 7/10)

•Web and DB Technologies

- HTML+CSS (Mastering Degree : 7/10)
- MySQL (Mastering Degree : 8/10)
- MongoDb (Mastering Degree : 7/10)
- Oracle Database (Mastering Degree : 5/10)
- SQL Server (Mastering Degree : 7/10)

•Operating Systems

- Linux (Mastering Degree : 7/10)
- Windows (Mastering Degree : 8/10)

•**Typesetting**

- \LaTeX (Mastering Degree : 8/10)
- Vim (Mastering Degree : 6/10)
- Microsoft Word (Mastering Degree : 8/10)

•**Coding Environments**

- Android Studio (Mastering Degree : 6/10)
- modelsim (Mastering Degree : 7/10)
- Pycharm (Mastering Degree : 6/10)
- CodeBlocks (Mastering Degree : 8/10)
- DevC++ (Mastering Degree : 7/10)
- Netbeans (Mastering Degree : 8/10)

•**Others**

- Matlab (Mastering Degree : 6/10)
- AVR microcontroller programming (Mastering Degree : 8/10)
- Game Maker (Mastering Degree : 7/10)

PROJECTS

•**Advanced Computer Programming:**

- Implementation of a graphical game (PlantsVsZombies) - Java.
- Implementation of a Parsi Calender - Java.
- Implementation of a simple Encryption and encoding System - Java.

•**Principles of Computer and Programming :**

- Design and Implement simple Compiler - C.

•**Data Structure :**

- search engine using inverted index algorithm - C++.
- Finite-State Automata - Java

•**Logic Design :**

- Designing a Traffic Light System - Verilog

•**Computer Architecture and design :**

- Basic Computer,Compiler,Cache,Pipeline - VHDL

•**Operating Systems:**

- Multiprocessing,Multithreading in Windows and Linux - C

•**Design Automation:**

- Phase1:Implementation of a car parking system - VHDL
- Phase2:Implementation of a co-software,hardware design using Microblaze - VHDL
- Phase3:Implementation of a Plant-Watering System with a moisturizing detection system - VHDL

•**Advanced Mathematics:**

- Phase1:Analyzing Distribution categories of a two class problem And] PCA - Python,MATLAB
- Phase2: Facial Recognition with Singular Value Decomposition - Python based on paper

All Project are Available in:

Github

REFERENCES

- **Professor Hamidreza Zarandi**
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[CV compiled on 2018-05-18]