

Amir Mohammad Yavari

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📄 [Amir-Yavari](#)

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EDUCATION

Amirkabir University of Technology

Bachelor of Science in Computer Engineering

Sep. 2016 – Present

Tehran, Iran

Mesbah High School & Pre-University

High School Diploma in Mathematics and Physics

Sep. 2012 – Aug. 2016

Tehran, Iran

RESEARCH INTERESTS

- Data Structures & Algorithms
- Operating Systems
- Network Security
- Database Management System (DBMS)
- Artificial Intelligence
- Network Programming
- Web Development
- iOS Development (Swift)
- Big Data Analysis

PROJECTS & RESEARCH ACTIVITIES

Investigation and Proposing a Method for Railroad Car Detachment 🔗

Nov. 2021 – Aug. 2022

B.Sc. Thesis, Supervised by Prof. Zarandi

- In this project intends to introduce one Intelligent (innovative) method based on wireless communication, a suitable solution with high reliability to solve the problem of rupture to be presented. The transmitter and receiver antenna, which are installed at the beginning and end of the train, will solve this issue.

Localized Remote Desktop 🔗

Apr. 2019 – Present

EBA[M](Experimental Branch of Architecture[Metropolitan])

- A remote access and remote control computer software, allowed maintenance of computers and other devices and this relies on local network and communicate through companies server. So security and speed were its main advantages over similar programs.

WORK EXPERIENCE

Experimental Branch of Architecture [Metropolitan] (EBA[M]+[C]) 🔗

Apr. 2019 – Present

Expanding architectural knowledge

- Developed remote desktop software for windows using C++
- Join and work in the IT section

Solaha Schools 🔗

Summer 2018

Educational Complex

Tehran, Iran

- Development of communication network

Belgravia Sky 🔗

Summer 2016

Construction & Renewal Energy

London, United Kingdom

- Develop and programming company's website

TEACHING EXPERIENCE

Teaching Assistant at the Amirkabir University of Technology

Fall 2020

for the course Computer Network

Teaching Assistant at the Amirkabir University of Technology

Spring 2018

for the course Principles of Computer & Programming

Teaching Assistant at the Mesbah High School

2017 – 2018

Physics for Pre-University and Olympiad Students

SELECTED COURSE PROJECT

- Maze Navigation Using Sensor Data** **Jul. 2021**
for the course Robotics, under the supervision of Dr. Seyed Ahmad JavanMardi
- The goal of this project was to let you keep practicing with ROS and Gazebo while starting using sensor data for robot navigation. In particular, the task will consists in designing a reactive controller that could let your robot navigating safely and effectively in a maze-like environment using basic sensor data (i.e., in a closed-loop modality). Safe means without collisions with obstacles, effectively means able to move fast and smooth in the “right” direction (as explained below).
- Online Store Website** **Jul. 2021**
for the course Web Programming, under the supervision of Parham Alvani
- Implemented a simple store with basic capabilities (front end and back end).
- Speech Enhancement** **Jan. 2020**
for the course Signals & Systems, under the supervision of Dr. Mehdi Rasti
- Implemented the Spectral Subtraction algorithm. This algorithm was a simple method for speech enhancement that could be used to eliminate noise.
- Distribution Calculator & P2P File Transfer** **Jan. 2019**
for the course Fundamental of Computer Network, under the supervision of Dr. Masoud Sabaei
- A distributed calculator that performs client calculations on the server and returns results.
 - The second software was a p2p file distribution system.
- Online Shopping Database** **Jan. 2019**
Course Fundamental of Database Design, under the supervision of Dr. Hamid Reza Shahriari
- Designed and implementation of a database related to an online store.
- JTanks Game** **Jul. 2018**
for the course Advanced Programming, under the supervision of Mohammad Mehdi Ahmadpanah
- programmed and developed JTanks game by using java language
- Image Processing** **Jul. 2018**
for the course Artificial Intelligence, under the supervision of Dr. Ahmad Nikabadi
- The purpose of this project was to design and implemented a program for the production of interactive videos. The program must separate the background area from the foreground area by receiving an incoming video file or receiving online images from a camera and display it by adding a graphic effect to the video.
- Basic Computer Design** **Jul. 2018**
for the course Computer Architecture, under the supervision of Dr. Hamed Farbeh
- A basic computer was designed with minimum hardware components to performed the basic tasks that a computer should perform (Mano 1993). The organization of the computer is defined by its internal registers. The internal organization of a digital system is defined by sequence of micro-operations that performed on data stored in its registers. The computer was capable of executing various micro-operations and could be instructed to perform a sequence of operations.
- Graph Coloring** **Jul. 2018**
for the course Algorithm Design, under the supervision of Dr. Alireza Bagheri
- In this project, intended to implement various graph coloring algorithms in Java. In fact, this issue was defined as:
Input: a graph $G(V,E)$ as CSV
Output: for each vertex, v belonging to V ; Top color (as a number between 1 and C)
These algorithms were actually a subset of the famous ”graph coloring” problem.
- Identify Social Structures in Graphs** **Jan. 2018**
for the course Data Structures, under the supervision of Dr. Mehdi Dehghan
- The goal of this project was to implement a graph-related algorithm. This algorithm was proposed in 2004, which detects social structures in a graph.
- Elevator Controller** **Jan. 2018**
for the course Logical Circuits, under the supervision of Dr. Morteza Saheb Zamani
- Implemented the machine designed for elevator management (receiving username and password) in VERILOG language and evaluate the correct operation of the code by simulate file.

HONORS & AWARDS

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| Full Scholarship for Undergraduate Studies <i>Amirkabir University of Technology, Tehran, Iran</i> | 2016 – 2022 |
| Member of Iran's National Elites Foundation <i>Iran</i> | 2016 – 2021 |
| Eligible to Choose Second Major During Bachelors due to Outstanding Projects <i>Amirkabir University of Technology, Tehran, Iran</i> | 2020 |
| Accepted for 2nd Level of Physics Olympiad <i>Iran</i> | 2015 |
| Accepted for 2nd Level of Computer Olympiad <i>Iran</i> | 2013 |

SKILLS & LANGUAGES

Programming Languages: Python, Java, C, C++, VHDL, VERILOG, SQL, HTML, CSS, JavaScript, Latex, MATLAB, Assembly, Swift

Developer Tools: VS Code, Xcode, Goland, IntelliJ Idea Ultimate

Technologies/Frameworks: Linux, GitHub, ReactJS, Redux, NextJS, NodeJS, Git

M.S. Office: Excel, Word, PowerPoint, Access

English: IELTS Band: 7.0/9.0 Listening: 0.0, Reading: 0.0, Writing: 0.0, Speaking: 0.0
(Test Date: 09/JAN/2022)

Farsi: Native

EXTRACURRICULAR ACTIVITIES

- Book Reader & Movie Geek
- Listener to Music especially Hip-Hop
- Swimmer & Runner
- Rock climbing
- Tennis Player & Snooker Player
- Fitness & Crossfitter
- Traveler & Camper
- Hanging out with Friends
- Computer & Video Gamer