# ARAD HAMIDSAMIEE

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### PROFESSIONAL COURSES

**DECEMBER 2020** 

**CS50.** BY HARVARD UNIVERSITY

**AN ONLINE COURSE** 

HTTPS://CERTIFICATES.CS50.IO/FBB4FCDD-ED2D-42CB-A275-37CFBA01B271.PDF?SIZE=LETTER

**SEPTEMBER 2020** 

COMPUTER GRAPHICS WITH MODERN OPENGL AND C++, BY BEN COOK

AN ONLINE COURSE THROUGH UDEMY

HTTPS://WWW.UDE.MY/UC-38D1CC9D-F3FB-4AFE-9E88-87BE547D9470/

**AUGUST 2020** 

**SUMMER AI SCHOOL, IPM INSTITUTE FOR RESEARCH IN FUNDAMENTAL SCIENCES** 

A THREE DAYS AI BOOT CAMP WITH 'INSTITUTE FOR COGNITIVE SCIENCE STUDIES', 'SHARIF UNIVERSITY OF TECHNOLOGY' AND 'UNIVERSITY OF TEHRAN'

**AUGUST 2020** 

PYTHON FOR EVERYBODY SPECIALIZATION, UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/SPECIALIZATION/EZYLLSYAFJRH

**AUGUST 2020** 

CAPSTONE: RETRIEVING, PROCESSING, AND VISUALIZING DATA WITH PYTHON (WITH

HONOR), UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/NSXKYM2CZUXU

**AUGUST 2020** 

USING DATABASES WITH PYTHON, UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/D39YM39YXGGU

**JULY 2020** 

USING PYTHON TO ACCESS WEB DATA, UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/SFM8DKX6SAKR

**JULY 2020** 

<sup>&</sup>lt;sup>1</sup> https://www.linkedin.com/in/aradhamidsamiee

### **PYTHON DATA STRUCTURES**, UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA
HTTPS://WWW.COURSERA.ORG/VERIFY/7X77UQBKU448

**JULY 2020** 

# PROGRAMMING FOR EVERYBODY (GETTING STARTED WITH PYTHON), UNIVERSITY OF MICHIGAN

AN ONLINE COURSE THROUGH COURSERA HTTPS://WWW.COURSERA.ORG/VERIFY/K33LNJQABR98

**JULY 2020** 

# FLUTTER & DART - THE COMPLETE GUIDE [2020 EDITION], ACADEMIND BY MAXIMILIAN SCHWARZMÜLLER

AN ONLINE COURSE THROUGH UDEMY HTTPS://WWW.UDE.MY/UC-91910131-4CEA-490E-94A5-7337F9524F9F

**JULY 2020** 

### **NETWORK HACKING – INTERMEDIATE TO ADVANCED**, ZSECURITY

AN ONLINE COURSE THROUGH UDEMY

HTTPS://ZSECURITY.ORG/CERTIFICATION/VALIDATION/?CERT\_NUMBER=6CJS52R7

HTTPS://WWW.UDE.MY/UC-39B83ECA-3147-4890-BDB9-0C1F89C45EEA

**JULY 2020** 

### **LEARN PYTHON AND ETHICHAL HACKING FROM SCRATCH**, ZSECURITY

AN ONLINE COURSE THROUGH UDEMY

HTTPS://ZSECURITY.ORG/CERTIFICATION/VALIDATION/?CERT\_NUMBER=H58VHR4Z

HTTPS://WWW.UDE.MY/UC-39B83ECA-3147-4890-BDB9-0C1F89C45EEA

**JULY 2020** 

### **LEARN ETHICHAL HACKING FROM SCRATCH**, ZSECURITY

AN ONLINE COURSE THROUGH UDEMY

HTTPS://ZSECURITY.ORG/CERTIFICATION/VALIDATION/?CERT\_NUMBER=CVRIB0OT

HTTPS://WWW.UDE.MY/UC-8F829BB9-F9E7-4797-A423-766DBE5BF907

**APR 2020** 

#### LINUX TOOLS FOR DEVELOPERS. THE LINUX FOUNDATION

AN ONLINE COURSE THROUGH COURSERA HTTPS://WWW.COURSERA.ORG/VERIFY/9ERN85S5W8AE

**APR 2020** 

### LINUX FOR DEVELOPERS, THE LINUX FOUNDATION

AN ONLINE COURSE THROUGH COURSERA
HTTPS://WWW.COURSERA.ORG/VERIFY/GFFV8U7RKZR2

**APR 2020** 

### **OPEN SOURCE SOFTWARE DEVELOPMENT METHODS**, THE LINUX FOUNDATION

AN ONLINE COURSE THROUGH COURSERA
HTTPS://WWW.COURSERA.ORG/VERIFY/D7KLKW7DKK42

**APR 2020** 

### **USING GIT FOR DISTRIBUTED DEVELOPMENT**, THE LINUX FOUNDATION

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/F49D9SXZ5NKW

**APR 2020** 

# OPEN SOURCE SOFTWARE DEVELOPMENT, LINUX AND GIT SPECIALIZATION, THE LINUX FOUNDATION

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/SPECIALIZATION/XY7NS84J5ZZ6

OCT 2019 (5-WEEK COURSE)

### THE INTRODUCTION TO QUANTUM COMPUTING, SAINT PETERSBURG STATE UNIVERSITY

AN ONLINE COURSE THROUGH COURSERA

HTTPS://WWW.COURSERA.ORG/VERIFY/YMPU48JVN3Z4

1 AUG - 12 SEP 2018

# THE UNITY GAME DEVELOPMENT ADVANCE, UT (UNIVERSITY OF TEHRAN)

**ADVANCED COURSE** 

15 FEB - 22 MARCH 2018

# THE GAME DEVELOPMENT AND PROGRAMMING WITH UNITY 3D ENGINE, UT (UNIVERSITY OF TEHRAN)

**INTERMEDIATE COURSE** 

8-14 MARCH 2017

# **1**ST **INTERNET OF THINGS CHALLENGE (IOT),** IUST (IRAN UNIVERSITY OF SCIENCE AND TECHNOLOGY), IEEE SPONSERED

A ONE WEEK CHALLENGE OF APPLIED IDEAS AND IMPLEMENTATIONS, AND A PRESENTATION TO SPONSORS AT THE END

2017

# THE INTRODUCTION TO MENDELEY, UT (CENTRAL LIBRARY OF UNIVERSITY OF TEHRAN)

AN ADMINISTRATIVE COURSE ABOUT GETTING TO KNOW MENDELEY AND WORKING WITH IT

2017

# THE INTRODUCTION TO DIGITAL CURRENCIES (BITCOIN, ETHERIUM, ETC), UT (ENGINEERING DEPARTMENT, UNIVERSITY OF TEHRAN)

A REVIEW ON HOW BITCOIN STARTED AND HOW IT WORKS, WHAT TYPES OF ENCRYPTION IT USES, HOW BLOCKCHAINS ARE FUNCTIONING, WHAT IS REQUIRED TO TRACK ONES BALANCE, WHAT TO DO INORDER TO START A NEW BLOCK AND GAIN 1BTC, FORKS AND THE IMPACT OF BITCOIN ON MOST DIGITAL CURRENCIES TODAY

2015

# **OLYMPIADS OF ASTRONOMY**, IRYSC

A PREPRATION COURSE FOR SCIENTIFIC OLYMPIADS

#### **DEC 2014**

# **ASTROLABE WORKSHOP**, SCIENCE MUSEUM

#### A COURSE ABOUT ASTROLABES AND HOW TO MAKE ONE

# **EXPERIENCE**

2021

# TA (TEACHER ASSISTANT), KHARAZMI UNIVERSITY

I've served as a teacher assistant in classes like Algorithms Design.

2021

# LECTURER, SADRA INSTITUTE OF HIGHER EDUCATION

Since early 2021 I've been a Lecturer in Sadra institute of higher education. I've taught Computer Simulation so far.

2020

### **INTERNSHIP, PARAND TECH GROUP**

I served as an intern and made a cross-platform smartphone application.

2019

### **TEACHER ASSISTANT, SADRA INSTITUTE OF HIGHER EDUCATION**

I was assistant in a couple of courses such as "Database Laboratory" and "Operating Systems Laboratory" and helped with finals.

# **EDUCATION**

OCT 2020 -

# MSCS STUDENT, KHARAZMI UNIVERSITY

Computer Science, Data Mining

**SEP 2016 - AUGUST 2020** 

**BACHELOR STUDENT, SADRA INSTITUTE OF HIGHER EDUCATION** 

Software Engineering

**SEP 2012 – JUNE 2016** 

**DIPLOMA, PISHGAM HIGH SCHOOL** 

Mathematics and Physic

# **LANGUAGES**

**ENGLISH** 

**AS A LEARNER** 

2012 - AUG 2015

Simin English Learning School

# **AS A TEACHER TRAINER**

2019

Simin English Learning School

# **FRENCH**

2016 - 2017

Times Institute of Foreign Languages

A1.1 - A2.3

2017 – NOW

CLF (Le Centre de langue française de Téhéran)

A1.1 - B2.1

# **SKILLS**

#### **PROGRAMING LANGUAGES**

- C, C#, C++ using gcc as the compiler (fluent)
- Python (fluent)
- Assembly
- HTML, CSS (fluent)
- JavaScript (fluent)
- GDscript (fluent)
- ASP .net (fluent)
- JAVA
- MatLab
- ADA95

#### **DATABASES**

- SQLite
- SQL Server
- MySQL

### MOST RECENT LIBRARIES I'VE BEEN WORKING WITH

- Flask
- Pandas
- PyQT5
- PyOpenGL
- Matplotlib Pyplot
- Numpy
- Pygame
- Opency intel
- Selenium
- OpenGL 2.0
- OpenGL 3.0

#### SIMULATION AND GRAPHICS ENVIRONMENTS

- UNIGINE 2.12 community
- Godot 3.2
- Unity 2018
- Unreal Engine 4.21
- Marmost Hexels 3
- Adobe Photoshop CC
- Adobe Premiere Pro
- Blender
- SketchUp

# **VIRTUALIZATION ENVIRONMENTS**

VirtualBox

- VMware
- Docker

#### **OPERATING SYSTEMS I'VE WORKED WITH**

- ARADOX (My own small kernel in development)
- Mint
- MINIX 3
- Ubuntu (since 2014)
- FreeBSD
- Fedora
- Kali Linux
- Parrot OS
- CentOS
- PopOS

#### CIRCUIT DESIGNING ENVIRONMENTS

Proteus Design Suite

#### **NETWORKING**

- Setting up, managing and handling VOIP service using ISSABEL
- Cisco Packet Tracer

#### **ACTIVITIES**

- OCTOBER 2006 Award Winner of Iranian Space Agency due to drawing competition of international space week
- 2010 Award Winner of Best writer for short story competition by ministry of education
- APRIL 2018 Developing A scanner and parser for Mini-Pascal programming language compiler using a list of tokens provided by the computer science group of The University of Helsinki<sup>2</sup>
- NOVEMBER 2018 Developing ASPX webpages, dashboards and portals coded in C# using SQL Server
- 2018 Developing A real-time face detector using C++ and OpenCV library that draws customizable polygons (rectangles) around face and eyes
- Developing A full functioning "web crawler" and "web scraper" coded in C# using selenium packages and web drivers and Xpath navigation
- 2019 Developing an educational c# program called "Database Handler" which allows students to perform database actions on a real database using GUI and forms, then the program displays the query.
- 2019 Setting up, managing and handling VOIP service using ISSABEL
- 2019 Developing a "sliding puzzle" solver coded in C#
- 2019 Developing a "8 Queens puzzle" solver coded in C# and MatLab (different approaches)
- 2019 Developing The game "Waves and Machines" coded in GDscript in Godot engine

<sup>&</sup>lt;sup>2</sup> https://www.cs.helsinki.fi/u/vihavain/k16/CodeGeneration/project/minipascalsyntax.pdf

- 2019 Launching and managing couple of personal web pages, coded in HTML5, CSS and JavaScript entirely such as <a href="https://aradhamidsamiee.github.io">https://aradhamidsamiee.github.io</a> and <a href="https://pv.bluepeople.dx.am/">https://aradhamidsamiee.github.io</a> and <a href="https://pv.bluepeople.dx.am/">https://pv.bluepeople.dx.am/</a>
- 2020 Developing the classic ping pong game using Assembly.
- 2020 Developing an even better version of my last crawler, coded in Python3 using "bs4" library (beautiful soup)
- 2020 Developing a functioning text based falling sand simulation with Python
- 2020 Developing a Python program that performs basic operations on images (selection tool pixel paint copy paste modifying hue saturation)
- 2020 Developing a vector based paint program with Python and OpenCV (cv2)
- OCTOBER 2020 Participating in Ludum Dare #47 jam in October 2020
- 2020 Writing ARADOX, my own OS, in development
- 2020 Producing a program that checks the health of PlayStation/Xbox/Nintendo joysticks and their 16 main buttons
- 2020 Dec Development of a multilayer perceptron that receives any dataset (also includes a .csv converter to a file that's actually easy to read) and trains on it by any number of layers the user demands.
- 2021 Jan Developing a full-fledged MCDM (multiple-choice decision making) web application from scratch, implementing all services and databases. Still in development. Source will be published on github soon.

# **REFERENCES**

Available upon request