Mahmood **Rezaee Qotb Abadi**

Undergraduate Electrical Engineering Student

Unit 7, 145 Building, Shahidan Fijani St., Shahid Salahshoor jonoobi St., Shiraz, Fars, Iran | P.C.: 7155967775

(+98) 9901338488 | theMahmoodRezaee@gmail.com | MahmoodRezaee.github.io | MahmoodRezaee | M-Rezaee

Education

Bachelor of Science in Electrical Engineering SPECIALIZED IN CONTROL SYSTEMS — *Shiraz , Fars , Iran*

Shiraz University — *Sep. 2016 - PRESENT*

- **GPA: 18.46/20.00 (3.96/4)**

HIGH SCHOOL Diploma - SPECIALIZED IN MATH AND PHYSICS — *Shiraz , Fars , Iran*

National Organization for Development of Exceptional Talents(NODET) — *2012-2016*

- **GPA: 18.90/20.00 (4/4)**

Research Interest

- Industrial Control System Security
- Artificial Intelligence
- Cyber-Physical Systems
- Deep Learning & Machine Learning
- Biomedical Engineering

Honors & Awards

2016-Present	**Ranked 1st among 190+ Students**, School of Electrical & Computer Engineering , Shiraz University	*Shiraz , Iran*
2016-Present	**Ranked 1st among 110+ Students**, Department of Electrical Engineering , Shiraz University	*Shiraz , Iran*
2019	**Ranked 4th and 23rd** , in 24th Regional and National Electrical Engineering Scientific Olympiad 2019 Iran's National Organization of Educational Testing (Sanjesh)	*Tehran , Iran*
2016	**Ranked within the top 4.5% among 162000+ participants**, in the National University Entrance Exam for Bachelor's degree - Math and Physics	*Shiraz,Iran*
2012	**Admitted**, in the entry exam to NODET High Schools (National Organization for Development of Exceptional Talents)	*Shiraz,Iran*

Technical Skills

Programming Languages

Proficient **Python, MATLAB , C , C++** ,
Familiar **HTML, CSS , Assembly Languages , LaTeX**,

Engineering Softwares

Proficient **LabVIEW, Proteus, CodeVision AVR , OrCAD PSpice , Logicworks , Siemens step7**,
Familiar **Altium Designer , AutoCAD**,

General Softwares

Proficient **Microsoft Office**,

Hardwares

Proficient **AVR Family , Arduino Family , Siemens PLC**,

Academic Projects

Cathodic Protection Voltage Measurement

Bachelor Project - Spring2019

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

IOT

Clients were created to measure the voltage at some stage of the gas transmission line using ADC(ADS1115) and to send the data in a specific time(using real-time clock PCF8563) to the server using the wifi module(ESP8266-07) and Server was created to collect data and to send it to the operator via SMS using GSM(SIM900L). Server and Clients PCB boards were designed by **Altium Designer**.

ChatRoom

Computer Applications in Control Class Project - Spring2020

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

Python & LabVIEW

The Server was programmed by **Python** and Clients were programmed in **LabVIEW**.Server also was able to write a database for the chatroom.

Voice Lock

Computer Applications in Control Class Project - Spring2020

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

LabVIEW

The voice lock application was programmed in **LabVIEW** to work with an online voice recording or using previously recorded voice;These functions made users be able to unlock the application using voice or even change the password to another voice spontaneously after confirming the pin code.

Image Processing and Video Processing

Computer Applications in Control Class Project - Spring2020

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

LabVIEW

Motion detection, Color detection, Shape detection, and both color and shape detection at the same time, in an online or offline video by **LabVIEW**.

PID tuning with Genetic Algorithm

Operation Research Class Project - Spring2019

SUPERVISED BY PROF.MARYAM DEHGHANI

MATLAB

PID controller parameters for a system were tuned with **Genetic Algorithm** to minimize Overshoot.

Fuzzy Logic-based Automatic door Control System

Computer Applications in Control Class Project - Spring2020

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

MATLAB

Implementation of Fuzzy logic to tune PID controller parameters for an Automatic door.

MultiMeter

Microprocessor Class Project - Fall2018

SUPERVISED BY PROF.H.PAKNIAT

CodeVision AVR, Proteus

A multimeter was programmed by **CodeVision AVR** and was simulated in **Proteus**. It was also able to find and show the RMS and Maximum value of a signal.

LTI Circuit analysis

Electrical Circuits Theory 1&2 Class Project - Spring2018

SUPERVISED BY PROF.MOHAMMAD ALI MASNADI SHIRAZI

MATLAB

Implementation of an **LTI Circuit analysis** in **MATLAB** that besides analyzing with either AC or DC input, computes zero-input and zero-state response of the circuit, the natural frequency of the circuit, the transfer function between two desired parameters in Laplace and et cetera

Control toolbox

Computer Applications in Control Class Project - Spring2020

SUPERVISED BY PROF.MOHAMMAD HASSAN ASEMANI

MATLAB

Designed different types of controllers such as PID controller, Lead-Lag controller, and state feedback controller for a system in **MATLAB**.

Selected Courses & Grades

- Industrial Control II : 19.6/20 , Prof.Ali Akbar Safavi
- Industrial Control I : 18.5/20 , Prof.Ali Akbar Safavi
- Digital Control Systems : 19.7/20 , Prof.Mohammad Hassan Asemani
- Modern Control Systems : 19.25/20 , Prof.Paknoush Karimaghaee
- Computer Applications in Control : 19.3/20 , Prof.Mohammad Hassan Asemani
- Operation Research : 19.5/20 , Prof.Maryam Dehghani
- Computer Networks : 19.5/20 , Prof.Alireza Keshavarz Haddad
- Linear Control Systems : 18.4/20 , Prof.Mohammad Mahdi Arefi
- Linear Control Systems Lab: 20/20 , Prof.Maryam Dehghani
- Microprocessors Lab : 19.9/20 , Prof.Navid Yasrebi
- Signals and Systems : 20/20 , Dr.Mohammad Neinavaie
- Computer Programming (C++) : 19.75/20 , Dr.Amir Hossein Rasekh
- Machine Learning , Stanford online course , Prof.Andrew NG

Teaching Experience

Fall 2020	**Digital Control Systems**, Holding Tutorial Class , Problem solving , Designing and Grading quizzes and assignments.	*Prof.Mohammad Hassan Asemani*
Spring 2020	**Linear Control Systems**, Holding Tutorial Class , Problem solving , Designing and Grading quizzes and assignments.	*Prof. Mohammad Mehdi Arefi*
Spring 2020	**Linear Control Systems Lab**, Teaching on recorded videos for virtual classes.	*Prof. Ali Akbar Safavi*
Spring 2020	**Operation Research**, Holding MATLAB Tutorial Class , Problem solving , Designing and Grading quizzes and assignments.	*Prof. Maryam Dehghani*
Spring 2019	**Electrical Circuits Theory II**, Holding Tutorial Class , Problem solving , Designing and Grading quizzes and assignments.	*Prof. Hadi Zayyani*

Work Experience

HAMPA Energy Engineering and Design Company , HEDCO . *Shiraz,Iran*

Interned at Instrument Department *Summer 2019*

- Learned about Instruments and their Technical Specifications and Datasheets and also Instrument Electrical Connection Details and worked with **AutoCAD** to draw P&ID.

Council of Electrical Engineering Student Scientific Association, Shiraz University *Shiraz,Iran*

Member *2017-2019*

- Held university open day event.
- Prepared student and faculty meetings.
- Prepared referral day ceremony event for new students.

Personal Traits

Highly motivated and eager to learn new things.

Accountable, Committed, Honest, Diligent, Meticulous, Cheerful, Flexible.

Languages

Persian

NATIVE

English

FLUENT

The TOEFL iBT test: to be taken Nov. 7. 2020

Arabic

BASIC

References

1.Dr.Ali Akbar Safavi

Professor

Department of Power and Control Engineering
School of Electrical and Computer Engineering
Shiraz University

Contact Information

email: safavi@shirazu.ac.ir
email: safavi_2003@yahoo.com
Phone(Work): (-) 98 71 36133112
Tel/Fax(Work): (-) 98 71 32303081

2.Dr.Mohammad Hassan Asemani

Associate Professor

Department of Power and Control Engineering
School of Electrical and Computer Engineering
Shiraz University

Contact Information

email: asemani@shirazu.ac.ir
email: Mhasemani1363@gmail.com
Phone(Work): (-) 98 71 36133080

3.Dr.Maryam Dehghani

Associate Professor

Department of Power and Control Engineering
School of Electrical and Computer Engineering
Shiraz University

Contact Information

email: mdehghani@shirazu.ac.ir
email: mdehghani.shiraz@gmail.com