# MUJGAN HUSEYNLI

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### **EDUCATION**

# George Washington University - MSc in Electrical Engineering

Washington, D.C.

GPA: 3.97/4.0

Jan 2023 - Dec 2024 (Expected)

Thesis: Design and Analysis of an FPGA-based Controller for GAN-based Three-Phase Inverters: Efficiency,

Performance, and Reliability Optimization

Related Courses: Electric Power Generation, Power Distribution Grids, Power Electronics, Smart Power Grids,

Power System Protection

University of Alcala - Erasmus+ Exchange Program

Alcala, Spain

Spent a semester on the Electronics and Mechanics Program

Jan - July 2020

Baku Higher Oil School - BSc in Electrical Engineering

GPA: 91.63/100

Baku, Azerbaijan Sep 2017 - June 2022

Thesis: Design of Level Control Loop by Control Valve at Emerson Test Rig

Related Courses: Calculus, Physics, Digital Electronics, Analog Electronics, Control Theory, Process, Digital Signal

and Data Processing, Industrial Computer Networks

#### **EXPERIENCE**

### Honeywell Process Solutions

Charlotte, NC

Project & Automation Solutions (PAS) - Project Engineer I

Sep 2023 - Now

- Configured and conducted tests on Honeywell systems (Experion PKS, C300 PLC and FGS) and developed specifications for third party equipment and instrumentation.
- Contributed to the design/development of project plans and schedules.
  Reviewed, developed, and prepared project documentation and drawings (DCS, marshalling, Server, Network, System cabinet drawings, I/O allocation, System Architecture, Power and Heat calculation, loop drawings) following standards, best practices, and use of company engineering tools.

  • Performed internal test and Pre-FAT, FAT, SAT activities of Honeywell control systems at Honeywell facilities

or at customer site.

- Configured devices such as controllers, I/O modules, and control firewalls to communicate with each other and the rest of the system.
- Provided technical support and troubleshooting for control systems during installation and commissioning.

#### SOCAR Polymer

Baku, Azerbaijan

Junior Instrumentation and Control Engineer

July 2022 - Jan 2023

- Participated in plant automation modernization which increased operation efficiency by 20%.
- Delivered frontline installation support and led Root Cause Failure Analysis (RCFA) initiatives, reducing equipment failures by 15%.
- Coordinated with *EPCs* and *OEMs*, ensuring project deliverables met critical timelines.
- Wrote field inspection reports, maintaining compliance with regulatory standards.
- Participated in the configuration/testing of the Integrated Control and Safety System (ICSS).

### SOCAR Polymer

Baku, Azerbaijan

Instrumentation and Controll Engineer Intern

Aug - Oct 2021

- Collaborated with team to diagnose and recalibrate faulty equipment, increasing machine uptime by 40%.
- Developed a pump overhaul alert system in SEBOL Programming Language for Yokoqawa Centum VP PLCs, reducing downtime by 25%.

#### Emerson

Baku, Azerbaijan

Jul 2021 - Sep 2021

Instrumentation and Control Intern

- Gained expertise in *Rosemount* measurement technologies for temperature, flow, pressure, and level.
- Learned valve sizing and selection using Fisher Specification Manager.

• Developed proficiency in *DeltaV* distributed control systems, controller setups, communication protocols, and PLC programming.

### HONORS AND AWARDS

### • ASPIRE 2023 Women's Workshop

Lisbon, Portugal May 24 - 26, 2023

Boston Consulting Group

- Selected as one of the few participants 10% acceptance rate.
- Participated in team-based case solving and presented solutions.
- Developed personal and professional skills through in-depth discussions with industry experts.
- Networked with talented students and consultants.

# • McKinsey Forward Program Fellow

New York, NY (Remote)

McKinsey & Company

Dec 2022 - May 2023

- McKinsey & Company
- Selected with a rigorous 5% acceptance rate.
- Developed leadership, problem solving, business, and digital skills, enhancing my professional versatility and impact across multiple industries.

# • Business Education for Engineers

Baku, Azerbaijan

BP(British Petroleum) & Baku Higher Oil School

May 06-23 2022

- A selective program with 10% acceptance rate among all national university students.

# • Presidential Scholarship

Baku, Azerbaijan

President of the Republic of Azerbaijan

Sep 2017

- Recognized by the head of state for ranking in the top %1 of national high school graduates.

### **PROJECTS**

# Assistive System for Visually Impaired People

- Implemented an assistive system for visually impaired users, using *Python* for backend development and *TensorFlow* for implementing deep learning models.
- Used OpenCV for real-time computer vision processing, enabling obstacle detection and path navigation.
- Integrated GPS modules for precise location tracking and Arduino for sensor data management, enhancing the system's responsiveness.
- Used Google Speech-to-Text API to convert voice commands to actions, providing a hands-free experience and increasing the system's accessibility and ease of use.

#### Safety Shower Water Refrigeration Package

- Designed and implemented a temperature control system for safety showers using Siemens TIA Portal and SIMATIC STEP 7.
- Using Human Machine Interface (HMI) design principles, enhanced operational efficiency and user experience.

### Tank Farm

• Developed a comprehensive SCADA system for tank level management using Siemens TIA Portal.

### **SKILLS**

Programming Languages Python, C/C++, JavaScript, Matlab/Simulink

Frameworks and Libraries Flask, TensorFlow, OpenCV, PyTorch, Scikit-Learn, NumPy, Pandas, SciPy,

MatPlotlib

Specialized Software DeltaV DCS, Siemens STEP 7, Siemens TIA Portal,

Yokogawa Centum VP DCS, AutoCAD/AutoCAD Electrical, TriStation,

NI LabView, Intel Quartus Prime, Arduino, VHDL, Verilog

Tools Git, LATEX, Bash

Languages English, German, Russian, Turkish, Azerbaijani