MOHAMMED ALYAS

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Education

Binghamton University, State University of New York, Watson School of Engineering **Expected: May '20**
Master of Science in Electrical and Electronic Engineering
University of Bridgeport, Bridgeport, CT **Jan '15 - Dec '18**
Bachelor of Science in Electrical and Electronic Engineering
Minor in Mathematics, and Computer Engineering
Dean's List: Spring '18, Fall '18 | **Certificate of Academic Accomplishment**, Annual Engineering Achievement Ceremony: Apr '18

Skills and Relevant Courses

Technical: Microsoft Office, Java, Matlab, AutoCAD, Python, PSPICE, C and C++, Debugging, Soldering, Implementing projects, Writing reports, Design and simulation
Courses: Network Analysis, Communication Lab, Controls Lab, Controls, Fiber Optics Lab, Embedded Systems, Digital Design, Electronics, DSP, Signals and Systems, PLC, Microprocessors, Economy and Engineering Management, Electric Machines, Power Electronics, Data and Computer Communication, Electric Drives, Bioenergy, Electrical Energy Storage System and Applications, Physics and Technology of Solar Cells

Certificates

OSHA 30-Hours General Industry DOL, Lean Six Sigma Green Belt (PREPARATION), Dale Carnegie Training

Project Experience

Optical Oxygen Sensors, Research, Binghamton University **Jan '19 - Current**
- Testing chemicals that allow to integrate and develop a sustainable Oxygen Sensor device by CMOS image sensing

Smart Shoes using Arduino, University of Bridgeport **Oct '18 - Nov '18**
- Created this aid system that allows users to attach the Ultrasonic Sensor based device that helps in avoiding obstacles
- Programmed and designed the prototype to the most economic specifications by using flexible low-cost components

Direct-Drive Wind Turbine Generator, Paper, University of Bridgeport **Oct '18 - Nov '18**
Researched and presented with a team of three for the common uses of the Direct-Drive Wind Turbine, its capabilities, challenges, and possible advancements

Temperature and Humidity Automatic Fan System using Arduino, University of Bridgeport **Nov '18 - Oct '18**
- Implemented the project to develop a fluctuation fan installed in the attic to balance the temperature for an economic reduction in the air-condition usage
- Provided Senior Design Course students a teachable tutorial that allows them to learn C/C++ programming and the project schematics and further instructions and understanding of the Microcontroller and useful parts for their projects

Sight Guidance System. (4th place at ASEE Conference), University of Bridgeport **Jan '18 - Apr '18**
- Designed a box attached to the user body that helps bring precise sensing to allow visually impaired individuals to be guided with a competitive economic and technological aid system that is assembled using seven sensors and four vibrators
- Developed and programmed the prototype with regards to the sensors preferred angle and distance and the vibration duration
- Presented the project on behalf of three group members, that achieved in winning 4th place Award at ASEE Conference

Low-cost Arduino-Based Ultrasonic Radar System. University of Bridgeport **Oct '17 - Mar '18**
- Designed the project modification and prototype to be highly efficient and an economic object detection Ultrasonic Radar
- Managed and led 5 team members to organize and follow the specific completion deadline and requirements for this project
- Presented the project to scholars and 4 Engineering Professional judges that resulted in winning the People Choice Award, at the Faculty Research Day at University of Bridgeport

Professional Experience

Office Assistant, the International Office for Students and Scholar, University of Bridgeport **Nov '17 - Dec '18**
- Assisted international students with travel signatures, employment paperwork, and inquiries regarding immigration status
- Monitored filing of confidential documents and records keeping of international students and events organization

Teacher Assistant, Electrical Engineering Department, University of Bridgeport **Aug '18 - Dec '18**
- Advised and helped students with their Senior Design Projects as well as academic and extracurricular advising
- Conducted research and implemented various Electrical Engineering related projects and assisted the Department Chair

Leadership Experience

- Robotics Club, Vice-President, University of Bridgeport **Jan '18 - Dec '18**
- Students Government Association, Senator of Engineering, University of Bridgeport **Jan '17 - Dec '18**
- General Education Committee, Students Representative**,** University of Bridgeport **Jan '18 - Dec '18**
- The Saudi Students Club (SSCUB), President, University of Bridgeport **May '17 - Nov '18**
- The Institute of Electrical and Electronic Engineers (IEEE), Chair, University of Bridgeport **Nov '17 - Nov '18**
- Engineers Without Borders (EWB), Public Relations Officer, University of Bridgeport **Jan '17 - May '18**