# AbdulRahman Abughazala

Intuitive & driven professional in Mechatronics/Robotics, exploring new technologies and renewable energy.

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### **WORK EXPERIENCE**

#### **Engineering Intern**

Omron Automation



05/2018-10/2018

Hoffman Estates, IL

- 10 week internship focused on Application Engineering, Project Management, Marketing & Sales.
- Completed training classes in Ladder Programming, Industrial Networks, & Safety Assessment.
- Real Plant exposure through traveling to 9 States and 20+ cities exploring semiconductor, manufacturing, packaging and automotive industries.
- Completed and presented project to executive team detailing doubling 2017 revenue of \$8 Billion, attaining higher market share within different automation industries and exploring new technologies.

## **Engineering Intern**

PepsiCo - Saudi Snack Foods

05/2017-10/2017



- Worked under supervision of Mechanical, Electrical and Mechatronic Engineers to maintain working conditions of automated packing machines and robots.
- Completed training in Industrial & Machine Safety, Machine & Factory Operations.
- Designed and presented project to engineering factory team detailing increasing factory and machine efficiency through new technologies

#### **EDUCATION**

#### **Mechatronic Engineering**

California State University, Chico

08/2015-05/2019

Courses:



- Motion/Machine Automation Control System Design
- Electronics Digital System Design Embedded Systems
- Logic Design Mechanical Design Instrumentation
- Circuits Thermodynamics Manufacturing

## Skills

- Ladder C/C++ Python HTML LabVIEW
- Industrial Networks Computer Systems Inventor
- SolidWorks Microsoft Office Suite 3D Printing & Design

# LANGUAGES

English

Arabic

Bilingual proficiency

Native proficiency

### **PROJECTS**

# **Automated Flow Test Station – Benchmark Electronics**

2018-2019 – Senior Capstone Team Design Project. Creative, Electrical and Programming lead. Winner of outstanding capstone project award.

- Designed, Programmed, and Manufactured a 5-micron repeatability 3 axis Cartesian Robot for leading manufacturer of semiconductor parts.
- Designed Schematics for complete integration between electrical and mechanical systems.
- Successfully integrated Galil motion control and LabVIEW programming for operator access and data acquisition.
- Successfully completed motorizing and electronic parts selection based on customer specification
- Improved testing efficiency and accuracy of semiconductor parts by 40%

### **SAE Formula Electric Competition Team**

2016-2018 – Team Competition

- Vice President & Power Train Systems Leader
- Coordinated meeting where I led a discussion & assigned weekly tasks for 6 team members' personal & team development
- Researched possible implementation of PLA plastic for Aerodynamics & bodywork sub-team

## **Autonomous/Self Driving Arduino Vehicle**

2018 – Team Project

 Successfully utilized a PID loop & Vision system to create a selfdriving & steering vehicle that can drive around any given circuit while staying in between the lanes.

## Automation Project – Peanut Butter Jar Sorter

2016 – Team Project

 Designed, Programmed, and Built a machine that can identify and sort jars within the packaging process with 98% accuracy.

#### **ASCE Mid Pacific Conference – Concrete Canoe**

2014-2016 – Team Competition

- Mix Design R&D Leader
- Designed a concrete mix that successfully achieved buoyancy & operation of canoe during competition
- Coordinated meetings, assigned task to 8 team members, managed project progression leading up to competition

## **VOLUNTEER EXPERIENCE**

### Volunteer

Golden Gate National Parks Conservancy-2015

• Removed Localized infestations of invasive plant species.

#### Lecturer

Society of Manufacturing Engineers (SME)-2017

 Lectured 4 classes of 175 Elementary, Middle and High School students about robotics and automation

#### Volunteer

Feed My Starving Children-2018

 Participated in a half day packaging of food to be distributed to children in 70 different countries.