

BAHIJ AL THUNAYAN

Saudi National | Annadir Ibn Nizar, Al Waha dist, AlQatif, Eastern Province, Saudi Arabia | +966581525860 | bahij.althu@gmail.com

EDUCATION:

Bachelor's Degree in Mechanical & Energy Engineering (Dean's List Award) (Honors) | Sept 2015 – April 2020

Ontario Tech University, Oshawa, Ontario, Canada

Environmental Science Studies | Sept 2011 – April 2014

University of Dammam, Eastern Province, Saudi Arabia

PROFESSIONAL CERTIFICATES:

Professional Accreditation Certificate <i>Saudi Council of Engineers, Kingdom of Saudi Arabia</i>	Jan.	2021
ISO 17025 QMS Internal Audit <i>RICI Ltd. , Dammam, Kingdom of Saudi Arabia</i>	Dec.	2020
OSHA 30 Industrial Safety Certificate <i>Summit Training Source, Michigan, United State</i>	Jan.	2019
Worker Health and Safety Awareness in 4 Steps <i>Ministry of Labour, Ontario, Canada</i>	Jul.	2019

WORK EXPERIENCES:

QA/QC Engineer *Picsarabia, Khobar, Saudi Arabia* | Nov. 2020 - Present

- Leading a technical team of 4 Engineers and 7 instrumentation technicians to implement onsite and off-site work.
- Increased production of the lab in Nov 2020 & Dec. 2020 by 7.5% to set the company record two times in a row.
- Working with a team to automate a HMI/PLC system resulted in reduction of about 50% of the calibration time.
- Supervised a team to implement ERP system used by onsite technical team and office employees in day-to-day tasks.
- Implemented QA activities through maintaining proper documentation as per ISO 17025 and ISO 9001 QMS.
- Implemented quality internal audits, Instruments inspection, personnel training and maintenance plans.
- Closely, supervised over 600 instrument calibration, repair, configuration of temperature, pressure, flow meters.
- Completed solo project of onsite flow verification using clamp-on ultrasonic flowmeter in 8 SWCC plants.
- Completed onsite troubleshooting and repairs of KRHONE and E&H flowmeters for multiple SEC powerplants.
- Handled clients complaints through investigations, root cause analysis and corrective actions.

Co - Founder, Content creator *Maker Academy, Dammam, Saudi Arabia* | Jul. 2019 - Present

- Developed product development & design training business from scratch to tens of thousands SAR of sales.
- Contributed in building online product development related courses involving more than 250 students.
- Created business visual identity and social media informative visual contents reached more than 113,000 of audience.

Mechanical field worker *Belden. Inc, Ontario, Cobourg* | May 2019 – Sept 2019

- Worked in 12 hours shifts on a rewinding machine to package ultra cables.
- Assisted in regular preventive maintenance activities to different complex mechanical machines.
- Scraped more than 100 cables and wires reels using mechanical machines like lifter, scrapper, and cable cutter.
- Performed Weekly lifter safety inspection to ensure compliance with all HS&E requirements.

Mechanical Designer *(SPOC), Ontario Tech University, Oshawa, Canada* | May 2017 – Apr 2018

- Worked with a multi-disciplined team of engineers to develop, design, and prototype creative products.
- Led an engineering team to develop an automated camera slider which included material selection FEA and 3D Printing.
- Evaluated different concept designs of sliding mechanisms including wheels, gears, and belt mechanism.

ACADEMIC PROJECTS:

Study of solar farm construction in Eastern province, Saudi Arabia | Nov 2019 - Dec 2019

- Designed a CSP tower with 10,000 heliostats with thermal storage to drive steam turbines for 24 hours.
- Achieved a thermal efficiency of 37.3% with 9 hours molten salt thermal storage through CSP heat collecting.
- Hit a LCOE of about 14.2 cents/kW with a capacity factor of 0.65 over a period of 26 years.

Wind Farm Feasibility Assessment in Cobourg, Canada | Oct 2019 - Nov 2019

- Estimated preliminary load of 200 GWh per year for the city of Cobourg population of 19,000.
- Conducted assessment of atmospheric boundary layer characteristics based on multiple data sources such as NASA.
- Performed Statistical analysis of wind data using Weibull and Rayleigh distributions and wind IEC classification.
- Sited 7 (Siemens SG 3.4-132) turbines based on topographic assessment using power law profile in an area of 3.17 km².

Capstone Design Project of Solar Based Refrigerators | Sept 2019 – Apr 2020

- Designed a PV powered 9.2 L medication cooler to be used in off-grid rural areas.
- Reduced internal temperature using Arduino-controlled thermoelectric cooling.
- Tested the design which achieved 9 degrees temperature reduction using solar panels with about 15% efficiency.

TECHNICAL SKILLS:

Design/Analysis: Energy system design, Solar Thermal and PV system design, energy storage, CFD, strong math and computer skills, fluid power systems, flow instrumentation service, CCGT, LCOE, Uncertainty calculations, ISO 17025, ISO 9001.

Software: MS Office, Solidworks, Nx, AutoCAD, Automation Studio, Matlab, Visual Studio, SCADA EES, Tecnomatix.

Instrumentations: Hart Communicator protocol, troubleshooting and repairs, calibration, commissioning.

SOFT SKILLS:

- Strong leadership of technical teams
- proactive and self-starter personality
- Quality oriented mindset to provide client satisfaction
- Fluent communication skill in English and Arabic