# **MD ARSHAD RASHID SHAON**

Los Angeles, California | shaon.arshad@gmail.com | Phone: 562-387-8565 | www.arshadrashid.com

Experienced professional with over 5 years in electrical engineering and 4 years in supply chain management, with a proven ability to deliver results and solve complex problems in both technical and business environments.

# EDUCATION\_

University of Nevada Las Vegas, Las Vegas, Nevada, USA Master of Science in Electrical Engineering University of Dhaka, Dhaka, Bangladesh Master of Business Administration in Management Information Systems

Ahsanullah University of Science and Technology, Dhaka, Bangladesh Bachelor of Science in Electrical and Electronic Engineering

# TECHNOLOGY SKILLS

Programming Languages: Ladder Logic, Python, MATLAB, C++ Operating Systems: Windows Hardware Tools: PLC (Allen-Bradley Compact Logix), Inverter, Converter (Buck/Boost), Arduino UNO, Raspberry Pi Software Tools: LTSpice, BEopt, System Advisor Model (SAM), OpenDSS Design Software: AutoCAD (2D), Adobe Photoshop Management Tools: ERP (Oracle), MS Office

# TRAINING & CERTIFICATIONS

Programmable Logic Controllers (PLC): Automation - Level 1 & 2: Southern California Edison (4-Day Workshop)

• Momentary Motor Control, Controls in Series, 3-Wire Control, Electrical Interlock, Timers, Counters, Motor/Pump Controls Crash Course on Python by Google: Coursera (Duration: 6 Weeks)

Python Data Structures: Coursera (Duration: 6 Weeks)

Programming for Everybody - Getting Started with Python: Coursera (Duration: 7 Weeks) Total Productive Maintenance (TPM): Bangladesh-Japan Training Institute (Duration: 1 Day) AutoCAD (2D): Engineering Staff College, Bangladesh (Duration: 6 Weeks)

# WORK & LEADERSHIP EXPERIENCE

## Graduate Research Assistant, University of Nevada Las Vegas, Las Vegas, Nevada

- Collaborated with various stakeholders (UNLV, UNR, NV Energy) on a \$3M *Department of Energy* project to optimize residential solar PV, battery energy storage, and HVAC systems for cost reduction and grid services
- Conducted comprehensive analysis of large historical datasets to forecast solar irradiance and residential load, leveraging advanced tools such as PVlib Python and Facebook Prophet to enhance prediction accuracy

## Intern, AIRSPOOL LLC, Las Vegas, Nevada

- Investigated control circuits in solar-hybrid ACs, focusing on components like Buck-Boost converters, Op-Amps, ICs, and MPPT
- Gained hands-on experience with IoT, Arduino UNO, and Raspberry Pi.
- Co-developed a battery system to store excess solar energy for solar-hybrid ACs.
- Developed working relationships with potential foreign suppliers for solar-hybrid ACs and components

#### **Executive,** *Supply Chain, M. M. ISPAHANI LIMITED, Dhaka, Bangladesh* Promotion to **Senior Executive**

#### Promotion to Assistant Manager

- Led a 5-member team on various projects, including the installation of a \$550K auto rice mill, grain silo, ETP, and capital machinery
- Supervised the supply and installation of different power systems, including a 2000 KVA substation, 2 MW gas generator, diesel generators, and off-grid solar panels
- Reduced machine downtime by 3% through effective planning and timely delivery of spare parts
- Increased organization's profit by 1.8% through strategic negotiation, identifying skilled suppliers, and accurately forecasting spare parts demand

November 2016 - December 2018 January 2019 - December 2019 January 2020 - January 2021

May 2023 - August 2023

August 2021 - May 2024

November 2007 - December 2011 GPA **3.32**/4.00

August 2021 - August 2024

May 2013 - August 2016

GPA 3.71/4.00

GPA 3.66/4.00

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#### Assistant Manager, A. N. Woven Bulk Bag Industries Ltd., Narayanganj, Bangladesh

February 2012 - March 2014

- Managed a 12-member Operation & Maintenance team overseeing the upkeep of machinery, including gas and diesel generators, centrifugal chillers, air conditioning systems, water and hydraulic pumps, AC/DC motors, VFD, and off-grid solar PV systems
- Achieved a 2% increase in productivity by reducing average machine downtime from 2.1 hours to 1.2 hours through the implementation of preventive and corrective maintenance strategies
- Automated a manual system in the manufacturing process by applying expertise in electrical device switching (normally open and normally closed) and integrating magnetic contactors, magnetic relays, and electrical timer relays

## PUBLICATIONS\_

- M. A. R. Shaon and Y. Baghzouz, "Day-Ahead Residential Customer Load Forecasting Using Prophet", 2023 IEEE International Conference on Environment and Electrical, Madrid, Spain
- M. A. R. Shaon and Y. Baghzouz, "On the accuracy of open-source and commercial solar forecasting tools", 2022 International Conference and Utility Exhibition on Energy, Environment and Climate Change (ICUE), Pattaya, Thailand
- M. A. R. Shaon and Y. Baghzouz, "Customer Bill Management Using Thermal and Virtual Electricity Storage," 2022 20th International Conference on Harmonics & Quality of Power (ICHQP), Naples, Italy
- J. Johnson, M. A. R. Shaon and Y. Baghzouz, "Improved RC Model of Air Conditioning Load-A Case Study," 2023 IEEE PES Innovative Smart Grid Technologies Europe (ISGT EUROPE), Grenoble, France.

## SKILLS & AFFILIATION

- Leadership skills
- Communication skills
- Teamwork and collaboration skills
- Time management skills
- Attention to detail
- Problem-solving and critical-thinking skills

- Adaptability and flexibility
- Analytical skills
- Interpersonal skills
- Project management skills
- Creativity
- Innovation skills

Language: English, Bangla (Native)

Membership: Student Member of Institute of Electrical and Electronics Engineers (IEEE) Member of Institution of Engineers, Bangladesh (IEB)

## EXTRACURRICULAR\_

Volunteer, HELP of Southern Nevada

- Setup and distributed food to the community of Shannon West Homeless Youth Center (SWHYC)
- Kept dining and kitchen area of SWHYC clean and organized

2023 - Present