260 Main St, East Setauket
NY-11733
linkedin.com/in/imran-hossain-ece/

MD IMRAN HOSSAIN

(631) 520-3752
imran.md@stonybrook.edu
imran43ruet@gmail.com

EDUCATION

Stony Brook, NY **Stony Brook University** **Fall 2018 – May 2020**

- M.S. in Electrical and Computer Engineering, May 2020. GPA: 3.39 (In major-4.00)
- Graduate Coursework: Modern Sensors ; Advanced Design of Low-Noise and Low Power Analog Circuits; Integrated Electronic Devices & Circuit; Practical Machine Learning; Pattern Recognition; Data Science MOOC

Bangladesh **Rajshahi University of Engineering & Technology** **Jan 2010 – Dec 2014**

- BSc in Electrical & Electronics Engineering, December 2014. GPA: 3.66
- Coursework: Control System; Microprocessor and Microcomputer system; Power Protection and Switchgear; Numerical Method; HV Engineering; Electrical Machine; Power System; Measurement & Instrumentation

TECHNOLOGIES AND LANGUAGES

- Modeling/Simulation tools: CADENCE; VHDL; OrCAD PSpice; PCB design; LTspice; PyTorch; TensorFlow; Keras
- Software: **Python**; **MATLAB/ SIMULINK**; Assembly Language; C; C++; R; JAVA
- **HMI -Rockwell Factory Talk**; **Allen Bradly RSLogix 500/5000**, SIEMENS STEP 7; **AutoCAD Electrical**; VFD , AC/DC Servo Drive; SIEMENS- ProfiBus; ProfiNet; **Ladder Logic Programming**
- Software Applications: MS Office(Outlook, Excel, Word, PowerPoint, Project)

TECHNICAL EXPERIENCE (PROJECTS)

- **Analog-Digital Converter** (2019). Designed a Pipelined ADC(8-bit) using Folded Cascode Op-Amp(settling time 50ns & gain 70dB), Latch Comparator and SC Amplifier ; CADENCE VIRTOUSO, LINUX
- **Video Action Recognition** (2020). Implemented Recurrent Neural Network (LSTM) algorithm to classify different action in video dataset; Python, PyTorch
- **BLOWER ON OFF AUTO-Allen Bradley RSLogix 500 PLC Programming** (2015). Push button being pressed by hand and the blower starts running and continue to run until turn it off or put it into automatic control. Another possibility is holding the hand button down, the blower runs if not, it stops running. Then the last consideration is that the blower is running in automatic mode; HMI,RSlogix500
- **Automatic Traffic Signal Control-Allen Bradley RSLogix PLC Programming** (2015). Starting with press, RED signal ON for 10s and OFF, then after YELLOW signal ON for 10s and OFF, then after GREEN signal ON for 10s and OFF and process repeat; HMI,RSlogix500
- **Industrial heater control using Allen Bradley PLC** (2019). Designed a heater using alarms and notifications and a setpoint for temperature. A PID controller is also used; HMI,RSlogix500

EMPLOYMENT

Research Assistant **Stony Brook University** **Fall 2019 – Spring 2020**

- Developed Machine Learning algorithms to implement in analog IC design automation process.

Teaching Assistant **Stony Brook University** **Fall 2018 – Spring 2019**

- Courses: Embedded Microprocessor Systems Design I, Digital Design Using VHDL and PLDs
- Instructed undergrad students with their circuit connection, microcontroller, oscilloscope, and coding

Assistant (Control) Engineer **Walton, Bangladesh** **Feb 2015 –Dec 2016**

- Programmed automated machines system using **PLC programming**
- Developed electrical drawings, assembled drawings and wiring using AutoCAD Electrical.
- Maintained project by monitoring project progress; coordinated activities and assisted project manager.

ONLINE COURSES

- PLC Programming from Scratch
- Practical PLC Programming(PLC II)
- Advanced Programming Paradigms (PLC IV)
- HMI Programming & Design - FactoryTalk View ME SCADA PLC
- Connect I/O- A SoftPLC
- An Introduction to Profibus DP Networking