

WORK EXPERIENCE

- **Jamia Millia Islamia (*University of Polytechnic*)** New Delhi, IN
Lecturer, Computer Engineering Section *Aug 2024 - Present*
 - **Courses Taught:** Web Technology, Embedded System, Computer Organization & Architecture, Operating System, Computer Application, Computer Oriented Numerical Methods, C Programming, Data Structure & Algorithms
- **Indian Institute of Technology Delhi** New Delhi, IN
Jr. Research Fellow, Embedded System Laboratory *May 2023 - May 2024*
 - **Design and development of a subsidence detection system in landslide prone hill slopes.:**
 - Design and development of firmware for MEMS IMU sensors using the ESP32 series SoC.
 - Sensor node PCB design using KiCad EDA software.
 - Testing and debugging device functionality and protocols using a logic analyzer.
 - Conducting deployment of sensor node activities in the lab.

ACADEMIC QUALIFICATIONS

- **Master of Technology in Data Science** Jun'24 - Present
Department of Computer Engineering FET, Jamia Millia Islamia *New Delhi, India*
 - **Relevant courses:** Data Mining, Mathematics for Data science, Natural Language Processing, Deep learning, Distributed and Cloud Computing, Internet of Things
- **Master of Technology in Software Engineering** Jun'21 - Jun'23
Aligarh Muslim University (AMU), CGPA: 8.02/10.0 *Aligarh, India*
 - **Relevant courses:** Advance Computer Architecture, Machine Learning, Image processing and Computer vision, Big Data Analytics, Numerical and Statistical Techniques
- **Bachelor of Technology in Computer Science and Engineering** Jun'17 - Jun'21
Rajasthan Technical University, percentage: 68.01 *Kota, India*
 - **Relevant courses:** Data Structure, Operating System, Design & Analysis of Algorithm, Data Base Management System, Compiler Design, Embedded System, Distributed System.

SKILLS

- **Languages:** C/C++ (*advance*), Java/python (*Intermediate*)
- **Softwares :** Android Studio, Arduino IDE, Visual Studio, espressif-IDF
- **Framewroks/libraries :** Tensorflow, scikit-learn, NumPy, Pandas, matplotlib
- **Web :** HTML, CSS, JavaScript, Django, flask
- **Communication protocols :** I2C, SPI, UART, Zigbee, Bluetooth, 802.11, Thread, LoRa
- **Programmable devices :** AVR, STM8, STM32(ARM – based microcontrollers), EPS32, RP2040
- **Database :** MongoDB, MySQL
- **Instruction set architecture :** x86, AVR, RISC-V, MCS-51, 6502 (*Assembly languages*)
- **EDA :** KiCad (PCB schematic and board layout designing)

KEY ACADEMIC PROJECTS

- **miniflight:** Budget flight controller for drone using ATmega328p microcontroller - [repository](#)
- **AT89S52:** A SPI Programmer that can program AT89Sxx series of Microcontrollers - [repository](#)
- **Smart City Integration** using google voice kit
- **Microasm:** A Macro Assembler for MCS-51
- **8051 FPU:** Fast Floating Point Subroutines support for 8051 Microcontroller - [repository](#)
- **Micro6502:** 8-bit Computer using 6502 Microprocessor for Education purposes - [repository](#)

PUBLICATIONS

- : Saeed Akhtar, Rashid Ali, **Syed Mohd Ameen**; Predicting the surface elastic parameters of soft solids using multi-output decision tree regressor. AIP Conf. Proc. 2 July 2024; 3168 (1): 020024.
<https://doi.org/10.1063/5.0219700>
- : **Syed Mohd Ameen**, Yunus Kathat, Sunny Kr Shah, Kapil Kr Jangid, Ritika Sharma, "Implementation Graph Search Technique on A Navigation Line Follower Robot" IJSRED-V4I4P103 Page(s): 731-735

RESEARCH EXPERIENCE

- **M.Tech Thesis: Energy efficient heterogeneous multi-core architecture for edge computing devices**
- **B.TECH Project: (High level Assembler for MCS-51 ISA)**
- **AMURoboclub** Aligarh, IN
PG Representative *Jun 2022 - Jun 2023*
 - Taking various workshops on (STM32, Arduino, Raspberry pi) development board.
 - Supervise different projects group in the lab.
 - Manage ABU Robocon (Asia Pacific Robot contest) team as leader and mentor.
- **AIET Robotics Lab** Jaipur, IN
Software Engineer *Jul 2018 - Feb 2019*
 - Develop flight controller firmware using STM32 and AVR series of microcontroller (all the low-level subroutines written in assembly language in order to optimize every single byte and performance).
 - Testing and debugging the raw data of accelerometer, gyroscope.
 - Design flight controller PCB on Eagle EDA software.

PERSONAL INFORMATION

- * Address - Ghaffar Manzil Colony, Jamia Nagar, Okhla, New Delhi, Delhi 110025
- * Nationality - Indian
- * Passport Number - **Y6711248** (Valid up to 2033)