

EXPERIENCE

• Indian Institute of Technology Delhi

Jr. Research Fellow

New Delhi, IN

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.

EDUCATION

• Master of Technology in Software Engineering

Aligarh Muslim University (AMU), CGPA: 8.02/10.0

Jun 2021 - Jun 2023

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

Rajasthan Technical University, percentage: 68.01

Jun 2017 - Jun 2021

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
- **Framewroks/libraries :** Tensorflow, NumPy, Pandas, matplotlib
- **Web :** HTML, CSS, JavaScript, Django, flask
- **Communication protocols :** I2C, SPI, UART, Zigbee, Bluetooth, 802.11
- **Programmable devices :** AVR, PIC and ARM – based microcontrollers, EPS32, Raspberry pi 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
- **8051 FPU:** Fast Floating Point Subroutines support for 8051 Microcontroller - [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 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)