

## EXPERIENCE

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### • Indian Institute of Technology Delhi

*Jr. Research Fellow*

New Delhi, IN

May 2023 - Feb 2024

- **Design and development of a subsidence detection system in landslide prone hill slopes.:**
  - Design and development of sensor node firmware using ESP32 SOC's.
  - Sensor node PCB design on EDA software.
  - Conducting deployment of sensor node activities in the lab.

## EDUCATION

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### • 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

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- **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

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- **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

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- **Accepted :** Accepted: Saeed Akhtar, Dr. Rashid Ali, and **Syed Mohd Ameen**, "Predicting the Surface Elastic Parameters of Soft Solids using Multi-Output Decision Tree Regressor", International Conference on Recent Advancements in Computing Technologies Engineering (RACTE-2023).
- : **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

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○ **M.Tech Thesis: Energy efficient heterogeneous multi-core architecture for edge computing devices**

○ **B.TECH Project: (High level Assembler for MCS-51 ISA)**

○ **AMURoboclub**

*PG Representative*

Aligarh, IN  
*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**

*Software Engineer*

Jaipur, IN  
*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

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