

# Mahammad Sarfaraz Ahmad

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🌐 <https://mdsahmad39.github.io/ahmad-dev/>

## Summary

I have completed my bachelor's final year project at Blekinge Institute of Technology, Sweden. I have a keen interest in the Internet of Things (IoT) for which I have been doing work on both Software side as well as Hardware side. A well-presented, good all-round performer who when given a task, can work quickly and efficiently. Proactive attitude and strong work ethic. A highly organized, career-oriented with a zeal to achieve my goal in life. I use my interpersonal skills in responsibly and definitively. I'm exceptional with people and good at conflict resolution. Skilled at communicating complex information simply and entertainingly.

## Education

### Blekinge Institute of Technology (BTH)

Karlskrona, Sweden

B.TECH IN ELECTRONICS AND COMMUNICATION ENGINEERING -DUAL DEGREE

August. 2019 - June. 2020

- ECTS: 60 Credits (Total credits of 4 LP's).
- Thesis title: *Raspberry Pi Based Vision System for Foreign Object Debris (FOD) Detection.*
- Bachelor's Thesis Publication: <http://urn.kb.se/resolve?urn=urn:nbn:se:bth-20198>

### Andhra University College of Engineering

Visakhapatnam, India

B.TECH IN ELECTRONICS AND COMMUNICATION ENGINEERING -DUAL DEGREE

July. 2016 - March. 2019

- Got a Merit Scholarship which is given to promising students in ECE Department for doing final year project at BTH in Sweden.
- CGPA: 8.26 (Average of 6 semesters).

### Sri Chaitanya College

Vijayawada, India

SENIOR SECONDARY EXAMINATION

May. 2014 - April. 2016

- Percentage: 96.1%

### Dr KKR's Gowtham School

Gudivada, India

SECONDARY EXAMINATION

March. 2014

- Percentage: 95%

## Projects

### Raspberry Pi Based Vision System for Foreign Object Debris (FOD) Detection.

Karlskrona, Sweden

BACHELOR'S THESIS

March. 2020 - June. 2020

- The main purpose of this thesis project is to design and develop a cost-effective system for detection of Foreign Object Debris (FOD), dedicated to airports.
- The proposed solution is based on a computer vision system, which comprises of flexible off the shelf components such as a Raspberry Pi and Camera Module, allowing the simplistic and efficient way to detect FOD.
- The results are obtained using background subtraction for FOD detection and implementation of SSD (single-shot multi-box detector) model for FOD classification.
- The performance evaluation of the system is analysed by testing the system to detect FOD of different size for different distances.
- The web development is also implemented to notify the user in real-time when there is an occurrence of FOD.

### Modifying Coffee Maker into an IoT Device

Karlskrona, Sweden

MINI-PROJECT

December. 2019 - February. 2020

- The main purpose of this project is to monitor the coffee maker using Arduino, Sensors as well as implementing IoT(Internet of Things).
- The system will monitor the coffee maker's temperature, the coffee maker's power consumption, coffee's level and the real-time required to prepare it.
- Web-interface is also implemented, so that user can monitor coffee maker from anywhere as well giving basic control's to user in web-interface.
- The final result will give an estimate of the coffee maker's performance depending on the time, temperature, power consumed and level of coffee.

### A Simplified Client-Server Solution for File Management using Python

Karlskrona, Sweden

MINI-PROJECT

September. 2019 - November. 2019

- Worked as a single member to prepare a client-server model which is used all around us such as websites, chat programs, and e-mail.
- The server program awaits requests done by the client program and begins working on a request as soon as it is received.
- Server can perform operations such as creating new user, creating new folder and modifying folder, creating new text file and modifying text file.
- Users created during one session are also available the next time the server is started, and all folders, files, and data are properly accessible each and every-time.

## Skills

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<b>Web Dev</b>	HTML, CSS, JAVASCRIPT, Flask, Django, React, MySQL.
<b>Programming</b>	Python, Java, C++, MATLAB, $\LaTeX$ .
<b>Misc.</b>	Working with Embedded systems such as Arduino UNO and Raspberry Pi, Academic research, Teaching, $\LaTeX$ report writing.
<b>Languages</b>	Strong reading, writing and speaking competencies for English, Hindi, Telugu, Urdu.

## Key Competencies & Personal Skills

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- Accepting feedback & taking constructive criticism well.
- Able to develop and maintain good relationships with Students, Teachers Staff.
- Being a positive role model for younger students.
- Ability to produce consistently accurate work even whilst under pressure.
- Willingness to share skills, knowledge and expertise.
- Going the extra mile to make a difference, having the drive to lead and succeed. report writing.
- Bringing good ideas to Life and Taking the Initiative.
- Conducting Research and Operational Support.
- Quick Learner and very good at Analytical approach.
- Motivated Enthusiastic with Strong work Ethic.
- Clear and informative written and verbal communication skills.
- Ability to work quickly and efficiently with little supervision.
- Being alert to what is going on in an organization.