

UMAR FAROOQ MOHAMMAD

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EDUCATION

Pennsylvania State University, PA, USA

January 2020 - Present

Masters in Department of Computer Science

Courses: Computer Vision II, Pattern recognition and machine learning, DS & Algorithms

Osmania University, Hyderabad, India

July 2014 - June 2018

Bachelor of Engineering, Electronics and Communication

Overall GPA: 8.2/10

CARRIER OBJECTIVE

To work with technical intellectuals and enhance my skills in technology and research. With the ultimate goal to start my research to get my doctoral degree. I am highly motivated and eager to learn new things and have ability to work as an individual as well as in team.

ACADEMIC PROJECTS

Integrating Kalman filter with Siamese FC for Object tracking

This projects is in progress as part of my course Computer Vision II. The projects mainly focus to estimate search region by prediction instead of checking the multiple scales around the previous location of the object, And add robustness against face-paced object movement and Occlusion.

Performance analysis of IRNSS in a moving vehicle - Funded by ISRO

At the Advances GNSS Research Laboratory(AGRL) I have completed my undergraduate Thesis which mainly focus on the performance of the GNSS using a dual frequency receiver in an moving vehicle under many evaluation criteria and comparing its accuracy of location with GPS and submitted our results to ISRO for improvements to be considered for the NavIC(India's own navigation system).

Design of SPI module in Verilog HDL using FPGA Design flow

Under the guidance of scientist M.Manoj Kumar(RCI,DRDO), I have designed the Serial Peripheral Interface module with both transmitter and receiver protocols gained knowledge on FPGA Design flow and Verilog HDL.

Line following robot- Robotics Competition

Made a Robot using Arduino board, L293D motor driver IC, DC motors, photodiode, IR LED and demonstrated on straight line, curved, bent, zigzag paths etc.

MINI PROJECTS

Mobile controlled robot using DTMF module

Automated Toll gate using RFID module

Automated soil moisture detector for man less cultivation

TECHNICAL STRENGTHS

Programming Languages

C, Java, Matlab, Python, Verilog HDL, Assembly

Software Applications

Keil, Xilinx ISE, Cadence, Pega PRPC

Tools

MS Office, Latex

WORK EXPERIENCE

Pega Systems, India

June 2018 - Dec 2019

Associate System Architect

Projects Completed

- Payroll and Equity Automation for BCG (Boston Consulting Group)
- Travel Booking Application for CWT (Carlson Wagonlit Travel)

Skills Mastered

- Pega PRPC, Natural Language Processing, UI development, Building predictive and Adaptive models.

INTERNSHIPS

Pega Systems, India

January 2018 - June 2018

- As part of job placement I have done the internship at Pega Systems in my last semester which mainly focused on training me on the software and absorbing the corporate and Scrum culture.
- I have gained insights on many new things about the Agile methodologies and working in a team across globe using Scrum, Design thinking for problems of customer applications, Importance of Unit testing and Design Documentation.
- Completed a mini project by building an application for Online processing of campus placements, which was designed to be used by students, hiring companies and faculty.

Research Centre Imarat, DRDO, India

May 2017 - August 2017

- Under the project Design of SPI MODULE using Verilog HDL, the SPI MODULE was studied. The transmitter and receiver of the controller were designed.
- Simulated the transmitter and receiver of controller using Verilog HDL and tested the code using Xilinx ISE.

Electronics Corporation Of India Limited, ECIL

May 2016 - June 2016

- Trained for programming in 8051 Micro Controller and Gained Insights on working tool KEIL.
- Successfully completed an embedded project using 8051 Microcontroller and RFID module.

PAPER PUBLICATIONS

- Design of SPI module using Verilog HDL Programming language in FPGA design flow – IJEDR1704175

ACADEMIC ACHIEVEMENTS

- Secured 664th rank in Engineering and Medical common entrance test (EAMCET)-2014 out of 3,00,000 (approximately) who appeared for the exam and was admitted into Osmania University.
- Secured All India 32 rank in IEO (Indian Engineering Olympiad).
- Secured All India 154 rank in National Educational Scholarship Test (NEST-II) 2017.
- Gold medal for regional best in IMO (International Mathematics Olympiad).
- 3rd Prize in Line follower competition conducted at NIT Warangal (TECHNOZION 2K16).
- 2nd prize in paper presentation conducted at JNTU Hyd (QUEST 2K17).

AWARDS & RECOGNITION

- Received "Best outgoing student" award by the departmental alumni association for my work with them to build the alumni-student interaction platforms by organizing guest lectures, Alumni meetups and Technical talks.

LEADERSHIP SKILLS

- General Secretary , Electronics and Communication Engineering student association, Osmania University
- Convener of the annual technical fest AAKRUTHI of my under grad college in year 2018
- Student co-ordinator for the Global Alumni meet conducted at University College of Engineering.
- Headed the Social Media Marketing and Design wings of the Core organizing team of Aakruthi 2K17.

EXTRA-CIRRICULAR

- Local Impact Committee Lead of Hyderabad Region for INSIGHTSTEM International Organization which is Headed by Professor Jacob Noel-Stor, Columbia University
- Campus Representative for Google Crowdsourcing from University College of Engineering, Osmania University.
 - Successfully Completed a Google Crowdsourcing campaign with 100+ enthusiastic volunteers
 - Successfully Completed a Google Speech recognition campaign for Telugu and Urdu language.
- Worked for one Year with a Startup GYANDHAN to provide educational loans for Students.
- Conducted social service events cloth donation, fund raising activity as a member of NGO Youva.

PERSONAL INFORMATION

Date of birth	September 3, 1996.
Languages Known	English, Hindi, Urdu, Telugu
Nationality	Indian
Interests and Hobbies	Voluntary work, Writing short comedy sets, badminton.