

RASIKA KULKARNI

Pune, Maharashtra | 9665789925 | rasikak0712@gmail.com

CAREER OBJECTIVE

To utilize my expertise in the field of electrical engineering and implement my innovative ideas and creative mind towards the area of specialization, having passion for EVs and battery technology, seeking to work on leading technology projects and add value through my technical and teaching expertise.

EDUCATION

Masters Certification Program in Electric Vehicle Design & Analysis, Skill-Lync.	(2022)
Masters in Electrical Power System, Sinhgad Institute of Technology Lonavala (7.15 CGPA)	(2016-2018)
Diploma in Software Testing	(2012)
BE in Electrical and Electronics Engineering, HIT Nidasoshi. (67.8%)	(2008-2012)
HSC, Sadhana Junior college, Gadhinglaj (69.33%)	(2007-2008)
SSC, V D Shinde Highschool Gadhinglaj (82.93%)	(2005-2006)

TECHNICAL SKILLS

- **Programming/ Simulation:** MATLAB, Simulink
- **Programming / Maintenance:** Embedded C essential, AVR Bare Metal Programming, software Verification and Validation
- Other: MS Office
- Tools used: Microchip Studio, STM32 cube IDE, LDRA tool, ARDUINO

EXPERIENCE

YBIT,Sawantwadi,Sindhudurg,Maharashtra----Assistant Professor

Jan'26 –till date

- Deliver lectures as per subjects
- Set Question paper, conduct exams and works as external examiner
- Work as Examiner and moderator for university examination
- Organized various technical and non - technical events.
- Co-ordinating cultural programs

NBN school of Engineering, Pune --- Assistant Professor

April'22 – March 25

- Deliver lectures as per subjects
- Set Question paper, conduct exams and works as external examiner
- Work as Examiner and moderator for university examination
- Organized various technical and non - technical events.
- Co-ordinating cultural programs

A S Traders and Developers, Pune— Business Development Executive

June'19 – Sept.'21

- Initiative to increase business development activities
- Coordinated with staff members and monitored work
- Handling key customer account and generate business from them
- Recruit tam as per business requirements.

Sant Gajanan Maharaj Rural Polytechnic, Mahagaon – Lecturer

June' 13- April 19

- Deliver lectures as per subjects
- Worked as Paper setter for subject “Power Electronics & Drives” for MSBTE
- Worked as Examiner and moderator for university examination
- Organized various technical and non - technical events.
- Co-ordinating cultural programs

PROJECTS:

1) To study and analyze the “BAJA all-terrain vehicle(ATV) model using Simulink.

- The major blocks used are Generic engine, CVT transmission, simple gear, vehicle body, double shoe, brake, tire
- In this project analysed BAJA ATV model without dashboard, BAJA ATV model with dashboard, BAJA ATV model - mapped lookup table with Dashboard

2) Creation of user defined data type to implement the user interfaces for working with Set (mathematical set theory) using linked list.

- In this project, interfaces for mathematical Set Theory are implemented using C programming language. User can give the input like two list of data and this program will give the output as the union and intersection of these two lists.
- Create two list of data using linked list method, Insert the node to 1st and 2nd list accordingly.
- Intersection of data of two lists.
- Getting Union of two list.

3) Implement the Code for controlling the retraction and extension of Airplane's landing gear:

- In this project, controlling the retraction and extension of Airplane's landing gear can be implemented using Finite State Machine (FSM). FSM is the most efficient algorithm which is mathematical model of computation.
- Controlling the direction of Valve.
- Controlling the retraction and extension of Airplane's landing gear

4) Controlling a DC motor using PWM and monitoring its Running status

- Implement a system on simulator to control a DC motor using PMW
- Monitoring the running status of the DC motor using L293 motor driver which allows the DC motor to drive on any direction.
- Running status i.e. on which direction the DC motor is running is to be displayed on the LCD screen.

5) Measuring distance of an object using ultrasonic sensor (HC-SR04)

- The distance travelled by a wave to the object for which we want to measure the distance using Ultrasonic Distance Sensor (HC-SR04).
- Measuring Pulse width using Input Capture Mode of Timer 1

6) V&V SW Analysis

- Perform Static Code Review Analysis
- Manual and automation testing.

PUBLICATIONS

- Published and got certified for IEEE paper titled “**Optimal placement of DG by particle swarm optimization based on voltage stability increment and reduction in power loss**”-GCWCN conference SIT Lonavala (2018)
- Published IEEE paper titled “**End of Palletization Combining Process**” In 4th National Conference On Cognitive Computing (NCCC-22) Jointly Organized By NBN Sinhgad Technical Institutes Campus, Ambegaon
- Reviewed a technical paper in 2nd Online National Conference on Cognitive Computing (NCCC-2022) jointly organized by NBNSTIC NBN Sinhgad School of Engineering and Management Studies, Pune, from June 02-03, 2022.
- Published IEEE paper titled “**Renewable energy forecasting for an integrated smart grid**” In 4th National Conference on Cognitive Computing (NCCC-22) Jointly Organized by NBN Sinhgad Technical Institutes Campus, Ambegaon
- Worked As Reviewer In 3rd National Conference on Cognitive Computing (NCCC-23) Jointly Organized by NBN Sinhgad Technical Institutes Campus, Ambegaon,
- Worked As Reviewer In 4th National Conference on Cognitive Computing (NCCC-2024) Jointly Organized by NBN Sinhgad Technical Institutes Campus, Ambegaon, Pune and Publication Partner Journal of Positive Sciences, Pune during Apr 15-16, 2024.

AWARDS/ CERTIFICATIONS

- Embedded C essentials-Skill Lync institution (2022)
- AVR - Skill Lync institution (2022)
- V and V - Skill Lync institution (2022)
- Simulink for Electrical engineers- Skill Lync institution (2022)
- Best Admin Award- A S traders (2021)
- Best Teacher award- SGM (2019)
- Certificate of software testing- Seed infotech (2013)
- Got first prize in National level idea presentation-RIT, Islampur(2012)

EXTRACURRICULAR ACTIVITIES

- Playback singer- have done playback singing for various documentaries and short films
- Participated in Marathi sa re ga ma pa competition.
- Participated in Pune idol.
- Got various prizes in state level music competition.

LANGUAGES

English, Hindi, Marathi