

GAYATHRI REDDY

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I love creating things on the internet, especially websites! With a good foundation in data science and diverse studies during my B.Tech, I'm eager to embark on a dynamic career in software development.

EDUCATION

Indian Institute of Technology Dharwad, Dharwad, India

2020 - 2024

Bachelor of Technology in Electrical Engineering

CGPA: 7.69/10.00

Relevant Coursework: Pattern Recognition & Machine Learning, Optimization Theory & Algorithms, Probability Models, Data Analysis

EXPERIENCE

Full stack intern, Doutya Technologies, Bangalore, India

Nov 2023 - present

- Currently engaged in the design and development of websites, utilising React.js for the frontend and Node.js for the backend.
- Specialising in the proficient creation of mobile applications with a primary focus on React Native development.

Research and Development, IIT Dharwad, Dharwad, India

Aug 2023 - Oct 2023

- Currently conducting research on ML techniques for drought prediction using meteorological, hydrological, and remote sensing data, improving ML models with advanced algorithms, expanding datasets, and evaluating performance metrics for enhanced accuracy.

Research intern, IIT Dharwad, Dharwad, India

Jun 2022 - Jul 2022

- Utilised PLECS for thermal modelling of the buck converter, optimising thermal management strategies and reliability.
- Focused on 3-phase inverter topologies, using advanced circuit simulations to enhance research outcomes, evaluated solar cell performance to improve efficiency in renewable energy systems, using simulation tools like Simulink.

PROJECTS

Topic Modelling using LDA, [link](#)

Sep 2022 - Nov 2022

- Applied Latent Dirichlet Allocation (LDA) for topic modelling in a dataset of complaints, exposing hidden topics within the documents. Technologies: spacy, nltk, re, sklearn, pandas

Movie Subtitle Generator, [link](#)

Sep 2022 - Nov 2022

- Developed a user-friendly video subtitle generation application, involving audio extraction, speech-to-text conversion, translation, subtitles integration, and robust Subtitles API utilisation. Led UI/UX-focused full-stack development with Node.js backend.

Wireless Mobile Charger

Jan 2023 - Apr 2023

- Built an efficient wireless charger by using a forward converter topology and the TL494 controller to ensure the secure and effective transfer of energy between closely coupled coils, used LTspice for charger validation, enhancing reliability and performance.

Autonomous Grass Cutting Robot Development

Oct 2021

- Built an autonomous grass cutting robot, incorporating wireless Bluetooth control via Arduino and a 12V battery power source.
- Configured Arduino for HC-05 Bluetooth, UV sensor, relay, L298N motor. Explored Google Maps SDK for cutting zone estimation

Personal Projects

- Front-end: [simon-game](#), [dice-dual](#), [drum-kit](#), [purrfect match](#) Back-end: [todo-list](#), [weatherly](#), [sign-up](#)

EXTRA CURRICULAR

Coordination Team Member, Institute Innovation Council

May 2021 - Dec 2022

- Orchestrated a team of 40+ students and conducted E-Summit obtaining a reach of over 250k+ impressions handling INR 200k+
- Leveraged effective communication to engage with more than 100 celebrities nationwide, collaborating with 30+ members.

Student Mentor, IIT Dharwad, India

Nov 2021 - Nov 2022

- Provided guidance to 8 undergraduates, fostering academic and personal development throughout their college journey.

SKILLS

Languages & Skills: HTML | CSS | JavaScript | Full-Stack | MS Excel | Python | UI/UX | React.js | ReactNative | Vue.js | Tableau | Power BI

Frameworks and tools: Node.js | Express.js | MongoDB | MySQL | Git | Github | Heroku | Postman | Babel | RestAPIs | Azure | Figma

Areas of Interest: Web Design and Development, Frontend, Backend, Machine Learning, Data Science