PREETHAM G

📞 +91-7760763125 ✉ preethamgr123@gmail.com in PREETHAM Naik ⓞ PreethamNaik12 ⊕ Portfolio

EDUCATION

National Institute of Technology, Karnataka   December 2021 – April 2025 (expected)

B.Tech-Mechanical Engineering, 7.37 CGPA   *Surathkal, India*

EXPERIENCE

Department of Information Technology, NITK   April 2024 – Present

Research Intern   *Surathkal, India*

- Developed deep learning models for the **StairNet initiative**, aimed at improving visual perception for human-robot walking with prosthetic legs and exoskeletons over complex terrains like stairs.
- Implemented and fine-tuned a MobileNetV2 deep learning model for image classification using **PyTorch**, achieving an overall accuracy of 98.77 %.
- Applied advanced techniques including transfer learning, custom data augmentation, oversampling, and cosine annealing learning rate scheduling to enhance model performance and address class imbalance.

Central Research Facilty, NITK 🔗   March 2023 – Present

Web Developer   *Surathkal, India*

- Developed a website dedicated for slot booking of equipment use in CRF, versatile hub for high-end research.
- Collaborated with the team to design, optimize, and ensure a seamless user experience for website interfaces.
- Utilized **HTML**, **CSS**, and **Javascript** to create dynamic and interactive web elements, **Version Control Systems** to streamline teamwork and ensure seamless integration of contributions.

PROJECTS

Incident 🔗 | *ReactJS, Ruby on Rails, ThreeJS, MUI, Bootstrap*

- Developed an immersive website for Incident, NITK's annual 4-day cultural festival attracting over 45,000 visitors.
- Created a visually appealing user interface with ReactJS and Material UI, featuring interactive maps (Leaflet) and a 3D homepage (ThreeJS, React Three Fiber).
- Implemented event registration, pro show ticket bookings, and t-shirt sales functionalities. Integrated the React frontend with a Ruby on Rails backend using the react-rails gem.

Faculty Recruitment Portal 🔗 | *HTML, CSS, Javascript, Bootstrap, Ruby on Rails*

- Developed NITK's official Faculty Recruitment Portal, enabling candidates to apply for various faculty positions.
- Collaborated with a team of three to plan and develop the website's front-end using HTML, CSS, JavaScript, and Bootstrap.
- Focused on UI/UX design to create an intuitive and user-friendly interface, enhancing the overall user experience.

Parashu 🔗 | *ReactJS, MUI, Postman, REST APIs*

- Built Parashu, an AI powered news platform with summarization and contextual recommendations to transform news consumption, with a great user experience.
- Developed for BITS Pilani Postman API hackathon, showcasing innovative use of REST APIs.

TECHNICAL SKILLS

Languages: JavaScript, Python, C++

Frameworks: ReactJS, Django, Numpy, Pandas, Pytorch, Matplotlib, Seaborn

EXTRACURRICULAR

The Institution of Engineers, NITK Chapter

- Mentored **60+** mentees in a 4-week Summer Mentorship Program. Led project on **Real-Time** Chat app using **ReactJS** and **Firebase**. Developed technical skills, teamwork, and project management abilities.

National Cadet Corps (NCC)

- Demonstrated exceptional **leadership** and **teamwork** skills through active participation in NCC activities and successfully completing training programs.