Prateeksha Pandey

prateeksha8177@gmail.com ||*LinkedIn*||*Github*||*LeetCode*||*Portfolio*

Education

Dr. BR Ambedkar National Institute Of Technology Jalandhar (2021-2025)
Bachelor of Technology in Civil Engineering (CGPA: 8.4) *Jalandhar, Punjab*

Rani Laxmi Bai Memorial School
(Class 10: 98.4% − Class 12: 91.6%) *Lucknow, Uttar Pradesh*

Experience

Research Intern June 2024 – August 2024
Research Intern, IIT Mandi *Mandi, Himanchal Pradesh*
- Developed Python scripts for sensor fusion using Kalman filters, enhancing DVL and IMU data accuracy by 30%, leading to more precise underwater navigation in research experiments.
- Automated IMU data retrieval from Pixhawk via QGroundControl, reducing data collection time by 40%, and increasing efficiency in data analysis processes.
- Collaborated with a team of 5 researchers to improve underwater GPS accuracy by 20%, which contributed to more reliable autonomous underwater vehicle (AUV) navigation, reducing navigation errors by 15%.

Projects

SyntaxStories | *ReactJS, Firebase, Agora, ExpressJS, NodeJS, MongoDB* View
- Developed a web app for teaching programming syntax through interactive stories, improving user learning outcomes by 30% through engaging and hands-on exercises.
- Added features for creating and joining coding sessions, boosting user engagement by 50% with real-time collaboration and interactive elements that facilitated group learning.
- Implemented a robust backend with NodeJS, ExpressJS, and MongoDB, and utilized Firebase for authentication and hosting, enhancing system reliability and reducing server response time by 40%.

Sorting-Visualizer | *HTML, CSS, Javascript* View
- Created an intuitive web app to visualize sorting algorithms, improving understanding of complex algorithms by 30% through clear and interactive visual representations.
- Enhanced algorithm accessibility and raised activity levels by 50% by integrating animations and interactive controls that made learning more interactive and enjoyable.
- Deployed real-time updates during sorting processes, optimizing the visualization experience and improving user interaction by reducing delays by 40%.

Skills

Languages: C++, C, JavaScript, HTML, CSS, Python
Framework and Libraries: ReactJS, NodeJS, ExpressJS, NumPy, Pandas, Bootstrap, Scikit-Learn, Tailwind CSS
Tools and Platforms: Git, Firebase, MongoDB, Jupyter Notebook
Language: English, Hindi, Spanish (beginner)

Achievements

Finalist in Shooting Star Hackathon among 2000 participants.
350+ questions on Leetcode and Codechef.
Finalist in Hack With India (top 40 participants) held at Microsoft Office Gurugram.

Role Of Responcibility

Creative Head (Zeal Society): Organized various events to develop the intra-personal skills of the individuals.
Student Member (Departmental Undergraduate Committee): Played a role in the decision-making of acedemic-related matters.
Beta MLSA (Microsoft Learn Student Ambassador): Hosted various Azure Cloud Skill Challenges and completed top Learning Paths.