Prabhat Deshmukh

+91 97317 42338 | prabhat.deshmukh22@gmail.com | [LinkedIn](#) | github

EDUCATION

PES University   Karnataka, India
Bachelor of Technology in Computer Science   *CGPA 8.23, SGPA 9.08, Aug. 2022 – April. 2026*

EXPERIENCE

AURA   June 2024 – Present
Web developer at the AURA club   **PES University**
- As a web developer for the AURA club at PES University, I am contributing in the development of a dynamic and interactive club website.
- This ongoing project includes robust features such as secure user sign-up and login, powered by JSON Web Token (JWT) authentication, role-based access control, a vibrant public QA forum, and a dedicated event page to keep our community engaged and informed.
- My personal contribution involves designing the database relationships and developing the backend logic using Node.js, Express.js, and MongoDB.

Center for Information Security, Forensics and Cyber Resilience   June. 2024 – July. 2024
Summer Research Intern   **PES University**
- Explored the integration of Artificial Intelligence and Machine Learning in Autonomous Vehicles.
- Co-authored a comprehensive survey paper detailing various forensic techniques in autonomous vehicles, emphasizing the critical role of forensics in advancing the field and building public trust.
- Exposed vulnerabilities in deep learning models by successfully executing a backdoor attack on a machine learning model.
- Currently working on developing countermeasures to defend against such attacks.

PROJECTS

BudgetEase – Personal Financial Management Web App | *React.js, Spring Boot*   March 2025 – Present
- Built BudgetEase, a full-stack personal finance app using React and Spring Boot, applying SOLID/GRASP principles, UML modeling, and design patterns for a scalable and maintainable architecture.
- User profile management with secure authentication via JWT and profile picture upload.
- Goal-setting and budget-tracking with real-time notifications via WebSocket.
- Dual-mode transaction entry: manual and PayTM receipt parsing using Gemini Vision API.
- Reward system with composable points and badge models
- Clean, modular architecture adhering to design best practices and domain-driven design. ***github***

VerseVault | *Javascript, MySQL*   November 2024 – Present
- A simple bookstore website where users can search for books, add reviews and buy, vendors can add, update and delete books, and admins monitor activity.
- It uses ReactJS for the frontend, NodeJS, ExpressJS and mysql2 for the backend.
- Implemented triggers, procedures and functions in MySQL for various use cases.
- Integrated recommendation system.
- Ongoing development to integrate payment gateway ***github***

GitHub Activity | *Node.js*   February 2025
- Developed a Node.js CLI tool to fetch GitHub user activity using the GitHub API.
- Retrieves repositories, pull requests, issues, and commit history efficiently.
- Supports pagination to handle large datasets efficiently without exceeding API limits.
- Integrated LRU caching to optimize repeated requests, reducing API calls and improving response time. ***github***

TECHNICAL SKILLS

Languages: Java, Python, C, JavaScript, HTML/CSS
Frameworks: Node.js, Flask, Express.js, MongoDB, Tensorflow
Developer Tools: Git, VS Code, IntelliJ
Libraries: pandas, NumPy, Matplotlib
Courses: Computer Networks, Data Structures and Algorithms, Machine Learning, Web Development, Cryptography