Dhritabrata Mitra

dmitra2@mtu.edu • (810) 531-3212 • Houghton, Michigan • LinkedIn • GitHub • Video Demo

SUMMARY

Software Developer with 3+ years of experience in Full Stack development. Skilled at building easy-to-use, responsive websites using HTML, CSS, SCSS, TypeScript, React.js and Node.js. Experienced in fixing bugs, improving system performance, performing enhancement, and working with Agile teams following software development life cycle to deliver successful projects.

EDUCATION

Michigan Technological University, Houghton, Michigan

Master's Degree in Computer Science, 3.83/4 GPA

University of Engineering and Management, Kolkata, India

B.Tech, Computer Science, 8.48/10.00 DGPA (3.392 GPA)

July 2016 - May 2020

Expected April 2025

SKILLS

HTML, CSS, SASS/SCSS, JavaScript, Webpack, TypeScript, Node.js, Express, NoSQL, React, React Testing Library, Redux, JIRA, MongoDB, Git, Python, MySQL, Node JS and Bootstrap.

WORK EXPERIENCE

Cognizant Technology Solutions, Software Engineer

September 2020 – June 2023

- Collaborated with stakeholders, and team in an Agile environment to develop responsive and cross-functional userfriendly web interfaces for an e-commerce web application with React.js, which generated \$50000 profit.
- Actively participated in daily stand-up and sprint planning meetings, supporting project planning and execution by identifying risks, suggesting solutions and updating it on JIRA.
- Collaborated with back-end developers and testers to debug 10+ product features affecting 25 production sites, which resulted in significant performance improvement and system reliability by 80%.
- Resolved 30+ critical bugs by debugging and analyzing logs, improving application performance and reducing customer complaints by 40%.
- Developed modular and reusable ES6 web components, catering to diverse requirements across the UI.
- Performed unit testing using the React Testing Library to ensure the correct functionality of the changes.
- Developed JSON-based RESTful APIs for selecting store addresses, improving the speed of address selection and making the checkout process faster by 30%.
- Utilized Git for version control, including branching, merging, and deploying to development environments.
- Participated in software engineering life cycle (SDLC) to push changes to production environments.
- Worked with Material UI components for UI consistency and responsiveness, reducing development time by 20%.
- Worked with concepts like state management and virtual DOM to improve performance and make the code easy to
- Performed code reviews of 6 engineers and provided feedback that helped launch 15+ changes to the live production site.

Internships

Cognizant Technology Solutions, Software Engineer Intern

Jan 2020 - April 2020

- Fixed 10+ critical bugs and added 5+ features, increasing user engagement by 50% and improving platform performance and customer satisfaction.
- Performed unit test cases using Jest which ensures the reliability and correctness of React components.

PROJECT EXPERIENCE

Candy Crush Game with ReactJS (Video) (GitHub)

- Designed and developed a ReactJS game where players crush matching candies that are next to each other.
- The score increases by one each time a candy is crushed, and the final score is shown to the user.

Plant Disease Detection using Python (Video) (GitHub)

- Created a web app for users to upload plant images and detect if the plant is healthy, or has late or early blight.
- The front-end implementation was done in **React JS** and the back-end in **FastAPI**.
- A convolutional neural network model was used and its accuracy was 95%.
- The technologies used were Python, JavaScript, HTML, and CSS.

Psoriasis Detection Using Decision Vector and Image Processing with HTML, CSS and Python (GitHub)

- Helps determine if a person has psoriasis by taking MCQ responses.
- The responses create a decision vector, which is saved in the **MongoDB database** only if it's new.
- Users can upload an image to check for psoriasis and apply image processing to get the result.
- Python handles MongoDB and image processing, while HTML, CSS, and JavaScript are used for the rest.
- The accuracy provided by the machine learning model was 84%.

LEADERSHIP & INVOLVEMENT

- Graduate Student Assistant at Michigan Technological University
- Supervisor at WADS Dining Services

August 2024 – December 2024 January 2024 - June 2024

 Member of the Indian Student Organization of Michigan Technological University. August 2023 – present