Nitin Surya Imadabathuni

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SUMMARY

Experienced Full Stack Software Engineer with 3+ years of expertise in designing and delivering robust web applications. Demonstrated skills in implementing effective unit testing frameworks, collaborating seamlessly with cross-functional teams, and staying abreast of emerging tools and technologies.

EDUCATION

University of South Florida   Tampa, Florida

Master of Science in Computer Science   May 2025

Relevant Coursework: Data Structures, Algorithms, Cloud Computing, Data Mining, Artificial Intelligence, Machine Learning, Operating Systems

EXPERIENCE

Wipro   Hyderabad, India
Software Development Engineer   June 2019 – July 2021

- Developed and maintained full-stack web applications using React.js, Redux, Node.js, Express.js, MongoDB, HTML, CSS, and JavaScript, following the applications development procedures and concepts.
- Consulted with users, clients, and other technology groups on issues related to the web applications, and recommended programming solutions, installed, and supported customer exposure systems using Git and GitHub for version control and collaboration.
- Integrated RESTful APIs to fetch and display data from backend services using axios and Postman.
- Analyzed web applications to identify vulnerabilities and security issues using tools such as Lighthouse, Webpack, Babel, and ESLint. Performed unit testing using Jest and Enzyme and end-to-end testing using Cypress to ensure code quality and cross-browser compatibility.
- Served as advisor or coach to new or lower-level programmer analysts on web development best practices and tools such as React Developer Tools, VS Code extensions, and Chrome DevTools.
- Identified UI/UX design problems, analyzed information, and made evaluative judgements to recommend and implement solutions for web development issues using React best practices and custom hooks.
- Resolved front end issues by identifying and selecting solutions through the applications of acquired technical experience and guided by precedents such as React hooks, higher-order components, and redux-thunk.
- Acted as SME to senior stakeholders and /or other team members on web development topics such as responsive and interactive UI components using Bootstrap, Material UI, and TypeScript for type checking and written code readability.
- Appropriately assessed risk when business decisions were made regarding web development projects.
- Refactored and migrated legacy codebase from jQuery and AngularJS to React.js using modern syntax and features.
- Worked collaboratively or independently on assigned tasks.

MGN Technologies   Hyderabad, India
Software Engineer Intern   May 2018 – April 2019

- Designed, developed, and modified software systems using a modern development stack, incorporating technologies such as Java, Angular, React JS, CSS, JavaScript, and HTML.
- Collaborated with system engineers and users to analyze system performance standards, leveraging with Java Enterprise Edition (J2EE), XML, AJAX, and Web Services at an enterprise level.
- Conducted in-depth analysis of systems flow, data usage, and work processes, utilizing frameworks like Spring Framework, SQL, JMS, SOAP, and REST web services.
- Integrated existing software into new or modified systems, ensuring responsive design compatibility and optimal functionality across the full tech stack.
- Developed and executed comprehensive test procedures for software components, ensuring the reliability of applications and adherence to technical design and performance requirements.
- Translated user requirements into technical software design, applying my understanding of web services, HTML, CSS, and JavaScript.

PROJECTS

Todo App (React, Redux, and Framer Motion)
- Designed and developed a feature-rich Todo application using cutting-edge technologies, showcasing proficiency in React, Redux, and Framer Motion.
- This project seamlessly combines state management with Redux for optimal data flow and smooth animations using Framer Motion to enhance the user experience.
- Implemented a responsive user interface using React, ensuring a dynamic and efficient single-page application.
- Leveraged Redux for state management, facilitating centralized control and synchronization of application data.

Application Tracker (React.js, Redux, Node.js, Express.js, MongoDB)
- Application Tracker is a comprehensive web application developed using React.js, Redux, Node.js, Express.js, and MongoDB.
- The application effectively tracks and manages job applications, providing users with a centralized platform for organizing their job search process.
- Leveraged React components for modular design, enhancing maintainability and scalability.
- Implemented Redux for centralized state management, ensuring a consistent and predictable application state.
- Developed a resilient server-side architecture with Node.js and Express.js, facilitating seamless communication between the front-end and the NoSQL database.

3D Expression Recognition (Python, Machine Learning)
- The project involves analyzing 3D facial landmarks using three classic machine learning algorithms: Random Forest (RF), Support Vector Machine (SVM), and Decision Tree (TREE).
- The analysis is performed on raw 3D landmarks, translated 3D landmarks to the origin, and rotated 3D landmarks around the x, y, and z axes.
- The experiments include 10-fold cross-validation for subject-independent validation.

Pain Classifier (Python, Machine Learning)
- The project involves developing a system to identify pain from physiological data collected from wearable devices.
- The system will be implemented in a Python script, and the program can be split into multiple files for modularity. The available data types are Diastolic Blood Pressure (dia), Systolic Blood Pressure (sys), Electrodermal Activity (EDA), and Respiration (res). The script takes command-line parameters (data type and data file) and performs hand-crafted feature extraction on the data, including mean, variance, min, and max for each data type. A fusion of all data types is also considered, resulting in 16 features per instance.
- A chosen classifier is used to train and test the model on the 60 subjects, with each subject having data for both pain and no pain classes. The experiment includes 10-fold cross-validation, ensuring that the same subject does not appear in both training and testing sets. The output of the script includes the confusion matrix, classification accuracy, precision, and recall, averaged over the 10 folds.
- The emphasis is on understanding how different data types influence accuracy rather than achieving 100% accuracy.

SKILLS

Programming	:	C, Python, Java, PHP, C++, C#
Web	:	JavaScript, ReactJS, AngularJS, HTML, CSS, NodeJS, Express JS, Bootstrap
Databases	:	MYSQL, MongoDB, PostgresSQL
Frameworks	:	Spring, Spring Boot, Hibernate
Tools and Software	:	IntelliJ, AWS, Microsoft Office Suite, Microsoft SQL Server, Visual Studio
Other Technologies	:	GIT, SVN, AWS, Jenkins, JIRA, Algorithms
Operating Systems	:	Windows, Linux (Ubuntu)