# 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.

#### **TECHNICAL SKILLS**

**Programming**: C, Python, Java, PHP, C++, C#

**Web** : JavaScript, ReactJS, AngularJS, HTML, CSS, NodeJS, Express JS, Bootstrap

Databases:MYSQL, MongoDB, PostgreSQLFrameworks: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)

#### **EXPERIENCE**

# Wipro (Infocrossing) Software Development Engineer

Hyderabad, India

June 2019 - July 2021

- Implemented Member360, a Comprehensive Membership Management System, automating Medicare eligibility verification through CMS Medicare Beneficiary Database (MBD). The solution ensures high acceptance rates and reduces avoidable TRR errors, resulting in increased enrollment first-pass rates and a notable 20% efficiency gain.
- Developed and maintained cost-effective full-stack web applications at Medicare, utilizing React.js, Redux, Node.js, Express.js, MongoDB, HTML, CSS, and JavaScript. The solution includes membership change triggers for automatic CMS transactions, capturing and processing CMS TRR and MMR transaction data, achieving a 15% reduction in overall costs. Implemented web applications for Sharp Health, Aetna, and Cigna.
- Provided strategic technical consultations, recommending programming solutions and supporting version control through Git and GitHub, aligning with business requirements for efficient collaboration and workflow management.
- Integrated RESTful APIs using axios and Postman, analyzed applications for vulnerabilities, and ensured high security and quality in compliance with CMS requirements.
- Conducted unit and end-to-end testing, guaranteeing code quality, cross-browser compatibility, and adherence to CMS audit requirements.
- Advised on web development best practices, UI/UX design, and Agile principles, contributing to a remarkable 20% increase in project efficiency and aligning development processes with business goals.
- Refactored and migrated a legacy codebase to React.js, enhancing application performance and user experience in line with the organization's commitment to technological advancements.
- Automated Medicare eligibility verification through Member360, ensuring accuracy and efficiency in the enrollment process. The solution provides a workflow for rejected members, TRC escalation reports, and automatically triggers letters based on member workflow status and TRC codes, contributing to a reduction in member complaints.
- Implemented Appeals & Grievances 360 (AG360), a standalone system that comprehensively manages appeals, grievances, and complaint processes. AG360 includes correspondence capabilities, end-to-end case tracking, user-definable categories, and integration with Member360, meeting CMS audit requirements.

# MGN Technologies Software Engineer Intern

Hyderabad, India 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.

#### **EDUCATION**

#### **University of South Florida**

Tampa, Florida

Master of Science in Computer Science

May 2023

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

#### **Vignan University**

Guntur, India

Bachelor of Technology in Computer Science

May 2019

**Relevant Coursework:** Data Structures, Algorithms, Computer Networks, Web Technologies, Cloud Computing, Big Data, Operating Systems, Internet of Things

## **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 NoSOL 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).
- $\bullet$  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.