#### Anu Prasanthi Pothula

Senior Software Engineer (React, Node, Java, AWS)
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### **Summary:**

With over 7 years of experience as a Senior Software Engineer, I specialize in designing and building scalable, high-performance web applications leveraging React.js, Node.js, AWS, microservices architecture, and cloud technologies. I have expertise across both front-end and back-end technologies, including Java, Spring Boot, and RESTful API design. Known for optimizing system performance, leading Agile teams, implementing CI/CD pipelines with Jenkins, and mentoring developers, I am committed to delivering innovative, business-oriented solutions.

### **Key Skills & Expertise:**

- Frontend Development: React.js, React Native, Redux (Redux-Thunk, Redux-Saga, Redux Toolkit), React Router, MobX, Flux.js, Material-UI, Chakra UI, Bootstrap, TypeScript, JavaScript (ES6+), HTML5, CSS3, SCSS, JSX, JSON
- **Styling & Design**: Styled-components, Emotion, BEM, CSS Grid, Flexbox, Media Queries, Responsive Design, CSS Modules, Figma, Sketch, Adobe XD
- **Performance Optimization**: Code Splitting, Lazy Loading, React Suspense, SSR (Next.js), SSG (Gatsby), React Profiler, Lighthouse, Redis, React Query, Caching Strategies
- **Testing & Debugging**: Jest, Mocha, Chai, Jasmine, Karma, Cypress, Protractor, React Testing Library, Chrome DevTools, Firebug
- Backend Development: Node.js, Java, Spring Boot, Spring MVC, Express.js, Microservices Architecture, RESTful APIs, SOAP, GraphQL, WebSockets
- State Management: Redux, Redux-Saga, Redux Thunk, React Context API, React Hooks
- Databases: MongoDB, MySQL, PostgreSQL, Oracle, MS SQL Server, Cassandra, SQL Query Optimization, Spring Data JPA, Hibernate
- Cloud Technologies & DevOps: AWS (Lambda, CloudFront, S3), Azure, Docker, Jenkins, GitHub Actions, CircleCI, Travis CI, Maven, Serverless Framework, AWS Lambda
- **Security**: JWT, OAuth 2.0, CORS Management, XSS Prevention, RBAC, CSP, Secure API Design, Input Sanitization
- Version Control & Collaboration: Git, GitHub, SVN, GitFlow, JIRA, Confluence, Trello
- CI/CD & Automation: Jenkins, GitHub Actions, CircleCI, Travis CI, Continuous Integration, Continuous Deployment
- Agile Methodologies: SCRUM, Sprint Planning, Backlog Grooming, Mentorship, Cross-Functional Collaboration
- **Mobile Development**: React Native, Progressive Web Apps (PWA), Mobile-First Design, Push Notifications, Offline Capabilities
- Project Management & Leadership: Team Lead, Cross-Functional Teams, Stakeholder Communication, Agile Coaching, Resource Allocation
- **Software Architecture & Design**: Microservices, SOA, Modular Design, Component-Based Architecture, Design Patterns (MVC, Singleton, Factory)

### **Core Competencies:**

• Leading the design and development of scalable, high-performance SPAs using React.js, Redux, and modern front-end libraries.

- Building and maintaining cloud-based solutions with AWS, ensuring continuous integration and delivery using Jenkins and Docker.
- Crafting seamless user experiences through advanced CSS, responsive design, and UI frameworks like Material-UI and Chakra UI.
- Implementing backend microservices with Java, Spring Boot, and Node.js while managing databases and ensuring performance optimization.
- Fostering team collaboration, providing mentorship, and driving Agile practices to meet business objectives and deadlines.
- Handling API integrations and performance optimization with Redis, React Query, Lighthouse, and caching strategies.

#### **Additional Skills:**

- Expertise in version control and CI/CD pipelines for automation and seamless delivery.
- Testing and quality assurance with frameworks like Jest, Mocha, Chai, and Cypress to ensure clean and maintainable code.
- Experienced in cloud services (AWS, Azure) and serverless architecture with AWS Lambda and CloudFront for optimized scaling.
- Strong knowledge of security best practices including JWT authentication, CORS, and XSS prevention to build secure applications.

**Certifications:** React: https://www.hackerrank.com/certificates/iframe/3dbe74721bed **Academics:** Bachelor of Engineering (B.E.) in Electronics and Communication

Professional Experience Senior Software Engineer Amiggi, Canada Internet)

**Project: Partner Portal** 

 Developed responsive, high-performance web applications using modern technologies such as React.js, JavaScript (ES6+), and SCSS, ensuring seamless cross-browser and cross-device experiences. Applied CSS Flexbox, CSS Grid, and Autoprefixer to build scalable layouts, optimizing for performance and accessibility.

July 2023 - Present (Client: Frontier

- Managed state and data flow using React Hooks, React Context API, and Redux Toolkit, improving app performance and reducing code complexity. Utilized Redux Thunk for handling asynchronous actions and improved debugging with Redux DevTools.
- Implemented dynamic routing and navigation with React Router, enabling nested routes, lazy loading, and code splitting to enhance app performance and user experience. Optimized page load times using React Suspense and other performance-focused techniques.
- Built reusable UI components with Material-UI, React-Bootstrap, and Chakra UI, maintaining design consistency and speeding up development. Styled with SCSS and BEM, and applied Styled-components and Emotion for scoped and maintainable design systems.
- Optimized application performance by implementing code splitting, lazy loading, SSR (via Next.js), and SSG (via Gatsby), leading to improved SEO and faster load times. Monitored app performance using tools like React Profiler and Lighthouse, applying optimizations to reduce latency.
- Secured applications by preventing XSS using React's automatic escaping, input sanitization with DOMPurify, and managed CORS with Axios and Fetch API. Implemented JWT-based authentication and OAuth 2.0 for secure user authentication and authorization, ensuring role-based access control (RBAC).

- Enhanced testing and quality assurance by creating comprehensive test suites with Jest for unit and integration testing, React Testing Library for component testing, and Cypress for end-to-end testing. Integrated automated testing into CI/CD pipelines with GitHub Actions, Travis CI, and CircleCI for continuous integration and deployment.
- Boosted application performance with caching strategies using React Query and Redis, reducing database queries and enhancing response times by up to 40%. Integrated PWA features, enabling offline support and further improving performance.
- Led Agile development cycles, collaborating across teams for sprint planning and backlog grooming. Managed version control with Git, following GitFlow and conducting code reviews to ensure high-quality code delivery.
- Integrated third-party services like Google Maps, Stripe, and Firebase for adding advanced features such as payment processing, real-time data, and geolocation.
- Deployed and maintained applications on cloud platforms like AWS (S3, Lambda, CloudFront), Netlify, and Vercel, ensuring scalability, high availability, and reliable backend integration.
- Designed scalable, modular architectures using Service-Oriented Architecture (SOA) and design patterns like Singleton and Factory, ensuring long-term maintainability and flexibility.

### **Technical Lead**

# Deloitte (Client: Axis Bank) Project: Axis Mutual Funds

Nov 2022 - June 2023

- Led and coordinated frontend development, delivering high-quality, performant web applications on time using React.js, JavaScript (ES6+), and SCSS. Ensured smooth backend integration and met business requirements.
- Collaborated with designers, backend engineers, and stakeholders to ensure a seamless, intuitive user experience. Used tools like Figma, Sketch, and Adobe XD to translate designs into responsive, pixel-perfect UI components.
- Architected scalable and maintainable frontend systems, focusing on React component design, state management with Redux/Redux Toolkit, and React Router for dynamic routing. Prioritized performance through modular architecture and clean code.
- Applied responsive design principles using CSS Flexbox, CSS Grid, SCSS, and media queries to create layouts that work on all devices. Focused on mobile-first development for optimal performance on smaller screens.
- Enforced high code quality standards with code reviews and mentorship. Followed SOLID principles, DRY, and KISS to ensure maintainable, clean code.
- Implemented security features to prevent XSS, manage CORS, and ensure secure user data. Applied Content Security Policies (CSP) and JWT-based authentication for secure data access.
- Proactively improved frontend performance, addressing bottlenecks and optimizing load times using code splitting, lazy loading, and React Suspense for a better user experience.
- Built reusable UI components with Material-UI, React-Bootstrap, and Chakra UI, ensuring design consistency and speeding up development.
- Collaborated with backend teams to design scalable APIs using Node.js and Express.js, supporting real-time features like WebSockets and Socket.io for instant updates.
- Optimized backend performance by profiling and improving response times for critical data endpoints by 20%, enhancing the user experience for complex data interactions.
- Acted as a liaison between frontend and other departments, ensuring alignment, scope clarity, and timely project delivery. Led Agile sprints and ensured timely releases.
- Integrated third-party services such as Google Maps API, Stripe, and Firebase for rich features like payments, real-time communication, and location-based services.

- Optimized frontend performance using service workers for offline capabilities, React Profiler for performance analysis, and Redis for caching API responses.
- Mentored junior developers, conducted training sessions, and fostered a collaborative team environment to encourage continuous growth.
- Implemented CI/CD pipelines using GitHub Actions, CircleCI, and Travis CI, automating deployments for smoother production releases.
- Ensured accessibility by following WCAG guidelines and conducting audits with Lighthouse to provide a seamless experience for all users.
- Built Progressive Web Apps (PWAs) with offline support, push notifications, and performance improvements for users with low connectivity.

### **Software Engineer**

Mphasis Limited,

May 2021 - Oct 2022

### **Project-1: Edge Price Forbes**

- Developed Edge Price Forbes Online using React.js for dynamic front-end development and Node.js for back-end services, with Redux for state management and React Router for efficient navigation.
- Designed and documented the project using Confluence, creating mockups and maintaining clear communication with team members.
- Built responsive user interfaces with Material-UI, incorporating CSS Flexbox, Grid, and media queries for mobile-friendly layouts, ensuring cross-browser compatibility.
- Implemented unit tests with Jest for reliable code coverage and performed integration testing using React Testing Library.
- Developed reusable React components for forms, lists, and tables, leveraging React Hooks for state and effect management to create modular and scalable UI elements.
- Ensured secure authentication through Role-Based Access Control (RBAC) and JWT for token-based user authentication.
- Integrated third-party APIs using Axios, connecting the front-end with back-end services for dynamic data fetching.
- Created interactive dashboards with libraries such as Chart.js and D3.js, displaying real-time data visualizations.
- Optimized app performance through techniques like Code Splitting, Lazy Loading, and React Profiler, reducing load times and improving user experience.
- Collaborated using Agile methodologies, participating in sprint planning, backlog grooming, and code reviews with tools like JIRA and Git for version control.
- Deployed the application on AWS using Docker for containerization, ensuring scalability and portability in cloud environments.

### Project-2: RBS (Royal Bank of Scotland)

- Developed responsive web pages using HTML5, CSS3, Material-UI, and React.js, ensuring cross-browser compatibility and a smooth user interface.
- Created reusable React components and managed state with Redux, implementing unidirectional data flow and using lifecycle methods, props, and state for efficient data transfer and UI updates.
- Utilized GitHub for version control, managing code branches, and deploying the application.
- Implemented Ajax calls to handle dynamic data fetching via JSON and integrated server-side content using Contentful.

**Software Engineer** 

Adecco (Client: WayCool Foods & Products Pvt Ltd)

Nov 2020 - April 2021

### **Project: My-Price**

- Used React.js with Redux Flux for logical programming and Material-UI for beautification.
- Managed the state of the application using Redux, ensuring that user sessions, pricing data, and other essential application states were consistently handled across the app.
- Employed Object-Oriented Programming principles to create reusable UI components and enhance modularity across web applications.
- Employed JavaScript (ES6+) to implement various features like form validation, user input processing, and API call handling, ensuring a smooth user experience.
- Implemented login, validations, roles, latitude, and longitude for location control.
- Used Axios for HTTP/HTTPS requests and attached Bearer token for secure usage of API.
- Built RESTful APIs using Spring Boot and Spring MVC to handle user authentication, pricing data, and transaction management for the My-Price platform
- Integrated databases like MongoDB and MySQL to ensure efficient data storage and retrieval for applications.
- Facilitated communication between applications by integrating SOAP and RESTful web services, ensuring efficient data exchange and smooth operations.
- Used Spring Data JPA with Hibernate for efficient handling of MongoDB data, optimizing performance and scalability.

## Software Developer Nipun Net Solutions

June 2018 - Oct 2020

### **Project: Asset Management**

- Developed responsive and modular front-end interfaces using React.js, HTML5, CSS3, and ES6+, ensuring real-time updates and seamless user interactions across devices.
- Integrated Axios to manage secure HTTP requests and synchronize data between frontend and backend services.
- Engineered backend services with Java 8 and Spring Boot, building scalable microservices and RESTful CRUD APIs for asset management and administrative workflows.
- Utilized Spring Data JPA and Hibernate for ORM, enabling efficient data operations with MySQL, and implemented Spring Security for role-based authentication and access control.
- Designed and optimized data handling using Java Collections (List, Map, Set) to support complex asset-related logic.
- Ensured reliable communication between frontend and backend by deploying Spring MVC-based endpoints.
- Wrote unit tests with JUnit to maintain code reliability and quality and leveraged Jenkins and Maven to automate CI/CD pipelines and build processes.

#### **PERSONAL PROJECTS**

- Developed a web app to manage my favorite movies list, which includes CRUD operations on Node.js and React.js routing on the front end.
- Developed an e-commerce site (Glam Up) with a sleek UI, which includes creating and updating shopping lists. Technologies involved are Node.js and React.