

Abbu Turab Syed
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PROFESSIONAL SUMMARY

- 6+ years of professional experience in architecture, design, development, and implementation of web applications and windows-based client-server applications with a strong focus on backend technologies using **Node.js, Express, MongoDB, PostgreSQL, AWS** (Lambda, S3, DynamoDB), Redis, and authentication mechanisms like JWT and OAuth. Proficient in building scalable, secure, and high-performance APIs, implementing microservices architecture, and optimizing database interactions for efficient data processing.
- Experienced in building single-page applications using React, with a focus on developing reusable components, implementing state management with Redux, and integrating GraphQL APIs for efficient data handling. Proficient in Playwright for end-to-end testing and ensuring Accessibility standards compliance (WCAG).
- Proficient in front-end development using **Javascript, HTML 5, CSS 3, Bootstrap**, and modern libraries, with hands-on experience in **Jest/React** Testing Library for unit testing and test-driven development.
- Experience in backend development using Node.js and Python, including building RESTful APIs, developing scalable microservices, and implementing server-side logic with Express, FastAPI, and Flask. Proficient in designing multi-layered architectures, optimizing database interactions with MongoDB, PostgreSQL, and Redis, and integrating authentication mechanisms like JWT and OAuth. Skilled in enhancing performance, implementing background jobs with worker threads and Celery, and ensuring secure, efficient data processing..
- Experience in integrating and optimizing **APIs**, leveraging Express, FastAPI, and Axios. Skilled in implementing authentication, caching, and efficient data handling for scalable and high-performance backend systems.
- Expertise in **Web Development** technologies like **HTML 5, CSS 3, Javascript, JSON, Bootstrap** frontend toolkit, Vue.js and ReactJS.
- Extensive **database design** and programming skills using SQL Server 2019, 2012, 2008 and Sybase.
- Experience in implementing unit testing for backend applications and APIs, following test-driven development (TDD) methodology. Proficient in writing tests using Jest, Mocha for Node.js utilizing the arrange-act-assert pattern. Skilled in debugging, resolving issues, and performing bug fixes to ensure reliability and maintainability in post-deployment support.
- Implemented Object-Oriented Programming (OOP) concepts and design patterns in backend applications. Experienced in data processing, reporting, and analysis using SQL, PostgreSQL, MongoDB, and AWS services. Skilled in optimizing database queries, designing efficient schemas, and ensuring data integrity in scalable applications.
- Designed and developed Use Cases, Class diagrams and Sequence diagrams using UML. Experience in using Team Foundation Server (TFS), **AWS DevOps**.
- Experienced in developing systems using Test Driven Development (**TDD**) and different software development methodologies like Agile and Waterfall.

TECHNICAL SKILLS

Databases / RDBMS:	Sybase, SQL Server 2005 & 2008, 2012, 2019, Postgres, MongoDB and MySQL
Programming Languages:	Javascript , Python, Java.
Data interchange formats:	XML, XSL, SOAP, WSDL, JSON, JWT

Development Tools:	Visual Studio 2008/2010/2013/2015, 2019, 2022, VS Code, Pycharm and Eclipse
Cloud Technologies:	Azure, AWS Lambda, AWS S3, AWS DynamoDB, AWS API Gateway, AWS CodePipeline, AWS CloudFormation, AWS Terraform, AWS EC2, AWS RDS, AWS IAM, AWS SQS.
Test Management Tools:	Jira
Source control Tools:	GIT, BitBucket, GitLab, TFS, Rational ClearCase
Front-End Technologies:	HTML5, Typescript , CSS 3, SASS, Bootstrap front-end toolkit, React/Redux
Debugging Tools:	Postman, Chrome DevTools

EDUCATION

Lewis University, Romeoville, IL

Master of Science in Computer Science | GPA: 4.0/4.0

Relevant Coursework: Software Engineering, Database Systems, Object-Oriented Programming, Software Architecture

PROFESSIONAL WORK EXPERIENCE

Master card, Chicago, IL

March 2023 – Present.

Role: Senior Backend Developer

Responsibilities:

- Designed and implemented scalable, high-performance APIs using Node.js, TypeScript, and Express.
- Led the development of dynamic backend services, utilizing GraphQL and RESTful APIs to handle complex data operations.
- Optimized API performance by over 30% through query optimization, caching, and response compression techniques.
- Collaborated with cross-functional teams to implement WebSockets for real-time data updates in backend services.
- Built and maintained unit and integration testing frameworks with Jest and Mocha, achieving 95% test coverage.
- Conducted API security audits, ensuring compliance with security best practices and data protection standards.
- Mentored junior backend developers, fostering a culture of continuous learning and knowledge sharing within the team.
- Spearheaded the migration of legacy monolithic applications to microservices architectures using Node.js and AWS services.
- Developed reusable backend libraries and API standards to standardize backend development across multiple teams.
- Implemented efficient GraphQL queries and mutations to optimize data fetching and reduce API response times.
- Utilized Playwright to automate backend API testing, ensuring robust and reliable deployments.
- Introduced async/await and Promises for improved handling of asynchronous operations and better code maintainability.
- Enhanced API security by integrating OAuth, JWT, and role-based access control for user authentication and authorization.
- Partnered with product managers to gather requirements, prioritize features, and deliver backend-focused solutions within Agile sprints.
- Championed security initiatives by implementing API rate limiting, data encryption, and compliance with security standards.

- Implemented Redis for caching and session management, significantly improving API response times and scalability.
- Collaborated with DevOps teams to implement CI/CD pipelines for automated testing and deployment of backend services.
- Analyze new requirements for different modules, drawing out a plan for releases of the enhancement for the application requested by the customer and planning work for subsequent releases.
- Develop client-side web pages using HTML5, CSS3, JavaScript (Typescript), Bootstrap.
- Created Typescript reusable components and services to consume REST API's using Component-based architecture provided.
- Developed and deployed serverless applications using AWS Lambda, API Gateway, and DynamoDB.
- Designed microservices and RESTful APIs with Node.js in a serverless environment.
- Implemented event-driven architectures using AWS SNS and SQS.
- Configured AWS CloudWatch for logging, monitoring, and creating custom metrics.

Environment: Node.js, TypeScript, Express, Jest, Mocha, GraphQL, RESTful APIs, WebSocket, AWS Lambda, AWS API Gateway, AWS S3, AWS DynamoDB, MongoDB, PostgreSQL, Redis, JWT, OAuth, Git, Docker, Terraform, CI/CD with AWS CodePipeline, Visual Studio Code, Azure DevOps.

Fission Labs, Hyderabad, India

Jan 2020 – Feb 2023

Role: Senior Full Stack Developer

Responsibilities:

- Worked with Node.js, Express, and MongoDB to develop scalable web applications and RESTful APIs, utilizing Mongoose for data modeling and MongoDB for efficient data storage.
- Designed and implemented full-stack applications using React, TypeScript, and Redux, ensuring type safety, optimized performance, and state management for large-scale applications.
- Led the development of dynamic user interfaces using React, focusing on reusable components, performance optimization, and integration with RESTful and GraphQL APIs.
- Collaborated with UX/UI designers to translate design prototypes into fully functional, high-quality React components, improving user experience.
- Implemented efficient backend services using Node.js, Express, and GraphQL, streamlining data fetching and enhancing application performance.
- Mentored team members on TypeScript, React best practices, and advanced JavaScript features to improve code quality and consistency.
- Utilized Playwright for end-to-end testing of both frontend and backend, ensuring reliability and cross-browser compatibility of web applications.
- Developed automated test scripts, reducing manual testing time by 40%, and established unit and integration tests with Jest and React Testing Library to ensure code quality.
- Configured and managed CI/CD pipelines using Azure DevOps, automating the build and deployment process for MERN stack applications.
- Advocated for and implemented accessibility (a11y) standards across web applications, ensuring compliance with WCAG guidelines and enhancing usability for all users.
- Managed backend and frontend application state using Redux, implemented middleware for handling asynchronous actions, and optimized performance using memoization techniques and selectors to minimize re-renders.
- Integrated GraphQL APIs for efficient data fetching, collaborating with backend teams to define schemas and resolve queries, optimizing the overall data flow.
- Wrote T-SQL stored procedures, optimized queries, and enhanced database performance, integrating MongoDB with the backend and ensuring efficient data handling.
- Migrated source code from Subversion to Azure DevOps repositories, improving version control and development workflow.
- Led the design and deployment of hybrid cloud applications, implementing a CI/CD pipeline using YAML for streamlined Azure-based deployments.
- Designed the page using Bootstrap and some custom CSS.

- Designed dynamic client-side JavaScript codes to build web forms and simulate processes for a web application, page navigation.
- Tracked and visualized application performance with AWS X-Ray for distributed tracing.
- Created and maintained infrastructure-as-code configurations using YAML with AWS CloudFormation and SAM.

Environment: TypeScript, React, Node.js, Express, MongoDB, GraphQL, Redux, Playwright, Jest, React Testing Library, Web APIs, JavaScript, HTML, CSS, Bootstrap, Git, GitHub, Version Control, CI/CD (Azure DevOps), Agile Methodologies, Code Review Practices, Performance Optimization, State Management, UI/UX Collaboration, Cross-Browser Compatibility, Responsive Design, Debugging Tools (Chrome DevTools), Testing Frameworks, T-SQL, Cloud Deployment (Azure).

Ensuredit, Hyderabad, India

July 2019 – Dec 2019

Role: Full Stack Engineer

- Developed Rest architecture-based web services to facilitate communication between client and servers.
- Agile/SCRUM was used as the project management methodology and JIRA & Confluence were the tools used to keep things in check
- Used My Eclipse as an IDE for developing the application.
- Worked with NoSQL Databases like Cloudmine based on MongoDB.
- A web application for connecting care providers and members. This project includes a server application with a data fetching requirement. We have exposed the services as Rest Web Services. We developed a backend system using NodeJS.
- Used AWS (Amazon Web Services) for email services, integrated with JavaScript code.
- A user provision script developed using NodeJS, which includes fetching files from an SFTP server and creating users in LDAP and a database using REST API calls.
- Used Node.JS to structure JavaScript code to build RESTful web services.
- Implemented generating the verification hash code using the crypto package on Node.JS.
- Participated in an Agile Development Team and had daily SCRUM meetings for progress reporting as well as task distribution.
- Used date-format and moment packages in Node.JS to save the timestamp in the database, converting it into GMT. Involved in Test-Driven Development by writing unit test cases.
- Used NodeJS to structure JavaScript code to build endpoints.
- Followed an agile process that interfaces with SCRUM teams and the client's staff daily and was involved in daily SCRUM meetings, sprint planning, showcases, and retrospectives. Involved in Test-Driven Development by writing functional and unit test cases.
- Involved in creating, debugging, and testing web services.
- Used Cloud Mine, a third-party application, to run server and database models as MongoDB.
- Used LDAP for user data storage and OAuth authentication.
- Used Apiary to document all the endpoints created.
- Used GitHub for source code management and JIRA for project management and issue tracking.
- Called the Restful web service calls for POST, PUT, DELETE and GET methods.
- Developed CSS3 to style page layouts, navigation and page-loading spinner.
- Helped to develop serverless framework for lambda function and upload files to S3 Bucket.

Environment: Node Js, Express, MongoDB, Postman, Visual Studio, NoSQL, Javascript, Jira, ESLint, Codeclimate, Git, SFTP, SSH2, LDAP, Chai, Mocha, Python, AWS.

Wipro, Hyderabad, India.

Nov 2018 – June 2019

Role: Backend Engineer

- Designed responsive web pages using media queries and Bootstrap for flexible grid layouts and components.

- Experienced in ReactJS, developing dynamic user interfaces and managing state with React and Redux.
- Worked with modern JavaScript (ECMAScript 6) features and tools like Babel and Webpack for transpiling JSX and ES6+ code.
- Developed Single Page Applications (SPAs) using React Router for routing and dynamic navigation.
- Integrated Axios with ReactJS for making AJAX calls to external APIs.
- Managed project builds and local server environments using Webpack and webpack-dev-server.
- Used TypeScript for enhanced type safety, working with features such as classes, interfaces, and modules.
- Configured Webpack, Babel, and Gulp for transpiling TypeScript to JavaScript and optimizing build processes.
- Developed server-side applications and RESTful APIs with Node.js and Express, implementing middleware and routing.
- Utilized MongoDB and Mongoose for database persistence, integrating with Node.js to handle data operations.
- Integrated Passport and JWT for user authentication and authorization in Node.js applications.
- Managed dependencies using npm and package.json, and automated tasks with Grunt and Gulp for minification, bundling, and Sass compilation.
- Worked with MEAN/MERN stack, combining MongoDB, Express, React, and Node.js to build full-stack applications.
- Configured Jasmine and Karma for unit and functional testing, using mocking frameworks and spies for test automation.
- Developed custom React components, ensuring reusable and maintainable code across the application.
- Ensured cross-browser compatibility and responsive design principles were met for all web pages.

Environment: HTML5, CSS3, JavaScript, TypeScript, ReactJS, Node.js, Express, MongoDB, Mongoose, Axios, Webpack, Babel, Redux, Passport, JWT, RESTful APIs, GIT, npm, Jasmine, Karma, Gulp, Grunt, MEAN/MERN stack, JSON, AJAX.