VANSH VEKARIA

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Summary

Skilled and solution-oriented software developer with extensive experience in building scalable web applications using modern JavaScript frameworks like React.js and Next.js. Proficient in backend development with Node.js, Express.js, and TypeScript, leveraging TSed and Sequelize ORM for seamless integration with MySQL and MongoDB databases. Strong expertise in TypeScript ensures the delivery of robust, type-safe code. A proactive team player with a track record of delivering high-quality, optimized solutions across various projects.

Technical Skills

Programming Languages: Java, JavaScript, TypeScrip, Python, C, HTML, CSS, SQL
Frontend: React.js, Next.js, Bootstrap, Tailwind CSS, Material UI, ShadCN
Backend: Node.js, Express.js, TSed, Sequelize ORM
Databases: MySQL, MongoDB, PostgreSQL
Message Queues / Job Queues: BullMQ, Redis
Payment Gateways: Stripe, Razorpay, Billdesk
Cloud & Messaging Services: AWS (EC2, SES, Amplify, S3, RDS), SendGrid, Firebase
Testing Tools: Jest
Software Tools: Eclipse, IntelliJ IDEA, VS Code, JIRA by Atlassian, Bitbucket, Gitea, Jupyter, PyCharm, CodeBlocks, MS Office
Other Tools/Technologies: Git, REST APIs, Agile/Scrum methodologies, Unix/Linux (Bash scripting)

Experience

BOSC Tech Labs Pvt. Ltd. *[April 2024] - [July 2025]*
Software developer

- Led the backend, web frontend, and admin panel development for a B2B e-commerce platform enabling users to place direct orders with suppliers. Applied object-oriented programming (OOP) principles to build modular, reusable, and maintainable services. Designed a normalized relational database schema (up to 2NF) using MySQL and PostgreSQL to ensure data integrity and performance. Built backend services using Node.js, Express.js, TypeScript, and TSed, and developed frontend components in React.js and Tailwind CSS. Collaborated closely with Business Analyst and QA team members following Agile/Scrum methodologies. Implemented a two-level queue architecture using Redis and BullMQ for asynchronous job processing. Integrated third-party accounting systems (Xero, QuickBooks, MYOB) for automated invoice syncing. Developed a robust role-based access control (RBAC) system and wrote unit tests using Jest to ensure code quality and reliability.
- Developed reusable components and adhered to best coding practices, significantly optimizing the development process. This proactive approach not only ensured code efficiency and maintainability but also contributed to the early delivery of the project, surpassing expectations. My focus on scalability and clean architecture enhanced the overall performance and future adaptability of the solution.
- Designed and developed a chatbot along with an SDK, enabling seamless integration into websites in just 5-10 minutes. The frontend and admin panel were built using Next.js, with the backend powered by Express.js, Node.js, and MongoDB. This solution significantly reduced the integration time, providing a highly efficient and scalable tool for rapid deployment across various platforms.
- Developed a SaaS product to streamline the management of landing pages hosted on multiple domains. Previously, managing separate admin panels with different credentials for each domain was complex and inefficient. I designed a solution that deploys landing pages on subdomains, allowing clients to easily point their own domains to these subdomains. The backend architecture (Express.js, Node.js, TypeScript, and MySQL) and frontend (Next.js) were engineered to support this flexible structure, with server-side rendering optimized for SEO. Additionally, I created a centralized admin panel in React.js, using Firebase for authentication, which eliminated the need for multiple credentials, significantly improving management efficiency.

BOSC Tech Labs Pvt. Ltd. *[September 2023] - [April 2024]*
Software developer intern

- Designed and implemented a reusable codebase for landing pages, initially created in React JS, and later optimized for SEO by transitioning the project to Next.js with server-side rendering. Automated webpage generation by building a form-based system that allows users to create fully functional landing pages, significantly reducing development time to under an hour.
- Integrated an admin panel using React Admin for streamlined management of landing pages.
- Enhanced project scalability and deployment efficiency, ensuring rapid landing page creation and SEO-friendly architecture.

CSRBOX Foundation *[February 2023] - [May 2023]*
Data Analytics Intern

- Developed strong skills in data analysis, data visualization, project management, and data cleaning/preprocessing; conducted analysis using Excel, SQL, and Tableau; presented insights to inform decision-making; participated in project planning and management.

Academic Projects

Rental Services *[Sem 6]*

- Independently designed, developed, and implemented a rental platform with user-friendly interface and inventory management; utilized ASP.NET Core MVC, HTML, CSS, JavaScript, and SQL for full-stack development, providing a convenient and cost-effective alternative to product purchases.

Road Safety Tool *[Sem 6]*

- Significantly contributed to the development of an interactive platform integrating Google Maps, a database, accident-prone regions, weather, accident statistics, traffic sign awareness, and emergency contact information during a .NET hackathon; focused on developing and managing the database component using ASP.NET Core MVC, HTML, CSS, JavaScript, and SQL technologies.

Multi Address Book *[Sem 6]*

- Developed a multi-address book platform with user-friendly interface and categorization, search and sort functionalities, for managing contacts for personal and professional use.
- The entire project was designed, developed, and implemented independently.
- The technologies utilized in this project were ASP.NET Core MVC, HTML, CSS, JavaScript and SQL.

Bangalore House Price Prediction *[Sem 6]*

- The Bangalore house price prediction project analyzes real estate data to predict house prices using machine learning algorithms. The project aims to provide accurate predictions and involve a web application for user-friendly access.
- I independently developed the entire project from concept to completion.
- The project utilized Python libraries including Pandas, NumPy, Matplotlib, Seaborn, and Scikit-learn along with various machine learning algorithms. Moreover, the model was deployed on a web application through Flask framework.

Face Detection *[Sem 5]*

- Developed a face detection software system using computer vision algorithms and machine learning techniques to identify and track human faces.
- The program utilizes OpenCV library for capturing video and detecting faces using the Haar Cascade classifier algorithm, and subsequently displaying the video feed with drawn rectangles around the detected faces.

Moving Object Detection *[Sem 5]*

- In this project, the OpenCV and imutils libraries are utilized to detect and track motion in a video stream. By comparing pixel intensity differences between successive frames, the program can accurately identify and locate moving objects within the stream.
- This project leverages computer vision and image processing methodologies, such as Gaussian blur, thresholding, contour detection, and bounding box visualization, to analyze images or video streams. The popular open-source OpenCV library is utilized to implement these techniques with accuracy and efficiency.

Handwriting Classification *[Sem 5]*

- In this project, a machine learning solution was created and executed to classify handwritten characters. The project employed OpenCV to preprocess the images, extract relevant features, and train the model on a labeled dataset. By implementing a rigorous model evaluation process, the solution achieved high classification accuracy.
- Employed a range of cutting-edge technologies to develop advanced image preprocessing and classification algorithms, including Python for implementation, OpenCV for basic image processing techniques such as resizing and thresholding, and Jupyter Notebook for streamlined presentation and documentation.

Education

Master of Engineering in Applied Data Science *[2025 - present]*
University Of Victoria, Victoria, BC, Canada

Bachelors in Computer Engineering *[2020 - 2024] [8.94 CGPA]*
Darshan Institute Of Engineering And Technology, Rajkot, Gujarat, India

Higher Secondary School Certificate *[2019 - 2020] [75.69%]*
A.B.Higher Secondary School, Navsari, Gujarat, India

Secondary School Certificate *[2017 - 2018] [78%]*
VidyaKunj School, Navsari, Gujarat, India