

Pechammal Vetrivel

Lead Engineer

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SUMMARY

Results-driven, hands-on cloud software professional with deep expertise in full-stack development using React.js, Node.js, Express, and MongoDB, and a strong focus on solving complex business problems through scalable SaaS solutions, Generative AI, and cloud-native integrations.

WORK EXPERIENCE

October 2023-Current

Consultant

🏢 Asiri.ai
📍 United States

- *Implemented APIs in Flask to facilitate the communication between front-end and back-end components.
- *Integrated OpenAI's natural language processing models to enhance communication intelligence within automated systems.
- *Utilized gTTS (Google Text-to-Speech) for converting text into high-quality spoken language, improving auditory aspects of automated communication.
- *Managed and manipulated data using Amazon S3 for efficient storage and retrieval of audio streams.
- *Integrated with Twilio for outbound and inbound calling for call Orchestration and fine-tuned call quality, silence detection and voice mail identification.
- *Integrated Whisper to leverage unique capabilities of natural language TTS.
- *Implemented secure authentication mechanisms using AWS credentials with boto3 for accessing S3 resources.
- *Demonstrated proficiency in working with MySQL databases, ensuring data integrity and availability for web applications.
- *Collaborated with cross-functional teams to integrate Python, Node and AWS based solutions, including OpenAI, gTTS, and Whisper, S3, Lambda and Twilio API's

October 2023-Current

Lead Engineer

🏢 WeSpotHire
📍 United States

- *Full Stack Developer
- *Built responsive, modular components in React.js, enhancing UI performance and code reusability.
- *Built and integrated RESTful APIs using Node.js and Express.js to ensure smooth frontend-backend communication
- *Utilized Next.js for server-side rendering (SSR), improving initial load times and SEO performance.
- *Implemented React Router for clean, dynamic navigation without full page reloads.
- *Enhanced performance by delivering pre-rendered server-side content for faster user interaction.

*Designed and optimized relational database schemas using MySQL Workbench, ensuring normalized structure and efficient queries.

*Integrated MySQL with backend APIs to support scalable and reliable data storage and retrieval.

*Styled UI components using Bootstrap for responsive and accessible design. Environment: React.js, React Router Node.js, Express.js, Mysql, Next.js, Bootstrap

September 2014-September 2023

Engineering Manager -Technology Integration

 SDKollections

 United States

*As Lead Integration developer and Manager responsible for all API integrations, email campaigns, Marketing operations, and Technology integrations for Supply chain and Delivery management solutions for SDKollections.

*Conducted comprehensive evaluations of Twilio, Salesforce, and AWS solutions to assess automated outbound calling campaigns.

*Worked on database integration with Flask applications, ensuring smooth data retrieval and storage.

*Contributed to the development of RESTful APIs, enhancing overall functionality and user experience.

*Managed and maintained the reliability and stability of automated Voice, SMS, and email communications for campaigns.

*Manage day-to-day backend operations for 20,000+ orders that comes through omnichannel retail environment from ecommerce drop ship orders, online orders, Facebook marketplace orders and WhatsApp market place orders.

*Managed price master database in AWS aurora and integrated with weekly vendor price sheets for accurate price updates for campaigns and billing etc.

*Created campaigns for various customer touchpoints including order confirmation email, shipment email and delivery email utilizing custom email campaign templates to promote the product (upsell) on multiple channels in an omnichannel environment.

*Managed timely execution of batch jobs to place drop ship orders and managing customer data quality for orders that is used for payments, payment verification and dispatch activities using automation and scheduled jobs.


*Managed enhancements and daily reporting activities for shipment manifest, product verification reporting, distribution, tracking logs using opensource Grafana Dashboards.

*Responsible for Management and customer and Vendor complaints for order placement API and fulfilment integration API's and end of day reporting's.

*Responsible for a successful automation and integrations of facebook marketplace API and Whatsapp marketplace API which helped us over 200% YoY for 3 years in a row.

May 2012-August 2014


Senior Software Engineer

 ISoft Innovations

 United States

July 2008-April 2012

Software Programmer

 Quest Systems Private Limited

 United States

September 2007-June 2008

Programmer

🏢 Medicare Systems
📍 United States

*Created and updated HLD, LLD documents with use cases and sequence diagrams.

*Designed database model using Erwin and developed complex stored procedures and triggers.

*Engineered dynamic SQL-based rules and rule editor for business rules.

*Developed Business components such as DB Manager, Rule Manager, and Utility Class.

*Environment: Visual Basic.net, Visual Basic Ver-6.0, SQL server 2000, COM, TrueDB Grid, Sheridan List.

SKILLS

React.js Node.js Express.js JavaScript Bootstrap Python Programming/Scripting Language
Amazon Web Services (AWS) JSON Amazon Simple Storage Service (S3) MySQL Flask Java
Salesforce.com Tomcat Microservices Log4j JUnit HTML (HyperText Markup Language)
CSS (Cascading Style Sheet) IDE (Integrated Development Environment) Oracle Web Services
XML (EXtensible Markup Language) JavaServer Pages (JSP) Java Servlets Apache Struts Hibernate
Microsoft SQL Server MongoDB REST (Representational State Transfer) Agile Programming Methodologies
Microsoft Visual Basic.NET Microsoft C# (C Sharp) Microsoft Visual Basic AWS Lambda Amazon CloudFront
JDBC (Java Database Connectivity) JAXB (Java Architecture for XML Binding) JAX-
WS (Java API for XML Web Services) PostgreSQL Microsoft Access Database
Microsoft IIS Web Server (Internet Information Services) Apache Microsoft Visual Studio Mail Services
Consulting Auditory Data Quality Internet Application Application Programming Interface (API)
Audio Streaming Natural Language Processing (NLP) Cross-Functional User Interface/Experience (UI/UX)
Authentication Voice Mail Communication Skills Data Management Modeling Languages
Computer Programming Database Administration Database Design Use Cases erwin Data Modeler
Business Development SQL (Structured Query Language) Microsoft SQL Server 2000 Procedure Development
Stored Procedures Database Triggers Business Writing Software Engineering Data Storage
React Router Database Technology Search Engine Optimization (SEO) Data Recovery
Database Optimization User Interface Design Engineering Management Open Source Billing Facebook
eCommerce Reporting Dashboards Automation Up-Selling Delivery Management Time Management
Email Campaign Campaigns Retail Order/Customer Fulfillment Customer/Client Research
Short Messaging Service (SMS) Promotional Programs Facebook Application Development
Supply Chain Management Quality Management Email Marketing Technical Operations
Application Integration JBoss Application Server Graphical User Interface (GUI)
AJAX (Asynchronous JavaScript and XML) Oracle Database 10g Sales SCJP - Sun Certified Java Programmer
Oracle Database 9i Oracle PL-SQL Cloud Computing Software as a Service (SaaS) Artificial Intelligence (AI)

Problem Solving Skills

CERTIFICATIONS

Sales Force Certified Developer (401 certified)

Sun Certified Java Programmer (SCJP) for Java 2

Oracle9i Certified Associate (OCA) PL/SQL Developer

LANGUAGES

English - Intermediate