

Premkumar Krishnan

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PROFILE SUMMARY

I am a positive, results-oriented professional with over 8 years of experience in designing complex web applications and managing database systems. Committed to continuous learning, I have successfully optimized web functionality to improve data retrieval and increase workflow efficiency. Recently, I have begun developing full-stack Generative AI applications

My key professional highlights are:

- Led website upgrades, integrating the latest technological advancements to enhance performance.
- Excelled in both team and independent work, consistently delivering high-quality results.
- Took ownership of application-related inquiries, providing timely and effective solutions.
- Committed to continuous learning, staying updated with the latest technologies and industry trends.
- Managed client requirements from consultation to delivery, ensuring high client satisfaction.
- Supported DevOps activities, including deployment, environment setup, and pipeline creation, ensuring seamless integration and delivery.

PROFESSIONAL EXPERIENCE

Senior Consultant

Deloitte Consulting India Private Limited

Jun 24 to Present

We at Deloitte Consulting India Private Limited are a leading global provider of consulting services, delivering innovative solutions in strategy, technology, and operations. As part of Deloitte's global network, we leverage deep industry expertise to help clients navigate complex business challenges and drive sustainable growth.

PROJECT SUMMARY

Doc Assist (Document Assistant)

Role Type : Fullstack developer

Offering : S&A AI & DATA

Client : Pfizer

Tools used : FastAPI, python, React, JavaScript, TypeScript, SQLAlchemy, GPT - 4, PostgreSQL, Neo4j, Pytest, Jest

Highlights :

- Populated blank Word documents with templates from AWS S3 based on chosen parameters in the plugin, eliminating the need for local template files.
- Stored versions of each user's template, allowing easy retrieval of content from previous versions through an API.
- Created a module using Word context to act as a bridge between the Word document and the plugin.
- Utilized content controls in the template to insert content generated using GPT-4.
- Maintained all state updates through context.
- Wrote front-end unit test cases using Jest and back-end unit test cases in Pytest.
- Provided an option to upload reference documents, enabling content generation from those references.

Constellation GPT (Medical Trial Chatbot)

Role Type : Fullstack developer

Offering : S&A AI & DATA

Client : Pfizer

Tools used : FastAPI, python, React, JavaScript, TypeScript, SQLAlchemy, GPT - 4, PostgreSQL, Neo4j, Pytest, Jest, MUI Components

Highlights :

- Developed a responsive web application using media queries and percentage design.
- Implemented dedicated chat history filters with a search bar, enabling seamless retrieval of previous chat history.
- Ingested documents into vector DB and Neo4j, allowing users to select the database for content generation.
- Send live updates from the backend using WebSockets, ensuring real-time updates on the frontend.
- Provided clickable citations within generated content, enhancing user experience.
- Integrated Sonar reports into the CI/CD pipeline and maintained reports within threshold values.
- Displayed ingested files to users, enabling queries on those files.
- Provided the ability to add corpora.
- Handled user authentication and extended user sessions using PingFederate.

Consultant

Deloitte Consulting India Private Limited

Nov 21 to May 24

PROJECT SUMMARY

Job Description and Levelling

Role Type : Front-End Developer

Offering : S&A AI&DATA

Client : Pfizer

Tools used : Gen AI, React, JavaScript, MUI components, OIDC, Docker, PXED Security group, @tanstack/react-query, Quill Rich Text Editor

Highlights :

- Integrated backend API endpoints using TanStack.
- Developed an API configuration module that fetches environment variables based on the browser URL.
- Implemented runtime validations to alert users immediately, reducing unnecessary API calls.
- Developed a text editor using Quill, enabling users to modify generated job descriptions.
- Captured user feedback to fine-tune prompts.
- Displayed toast messages for successful and failed API calls.
- Processed completed job description records using leveling models to display leveling information along with citations.

CGT (Cell and Gene Therapy) Vantage

Role Type : Front end developer

Offering : S&A AI&DATA

Client : AbbVie Inc.

Tools used : TypeScript, Node.js, Next.js, i18n, Jest, React.js, AWS Cognito, react-i18next

Highlights :

- Configured Jest framework and achieved 80% test coverage.
- Implemented internationalization for Chinese, Japanese, and German languages using react-i18next.
- Securely managed access token information in compliance with client requirements.
- Conducted a comprehensive review of the repository and provided detailed, actionable feedback to the development team.

Cognitive Spark for Clinical Development

Role Type : Back-end Developer & Dev Co-Ordinator

Offering : S&A Hybrid Solutions and Incubation

Client : Converge Health Product Development

Tools used : JavaScript, TypeScript, Node.js, React.js, Sequelize, AWS Neptune, Gremlin, Jest, Multer, Microservices, Postgres, OpenID Connect, Neptune Graph notebook

Highlights :

- Simplified ingestion of the latest CDISC data, reducing manual interaction by up to 90%.
- Coordinated development activities with the Lead, ensuring seamless project execution.
- Led a back-end team of 3 members, fostering collaboration and productivity.

- Developed approval workflows tailored to specific business requirements, enhancing process efficiency.
- Participated in the connectathon event with my team, earning special recognition for the CSC product.
- Established comprehensive unit testing processes, leading the team to achieve 80% code coverage.
- Completed several proof-of-concepts (POCs), including large file upload, microapp, and email functionality, driving product innovation.
- Ensured product compliance with SonarQube, enhancing code quality and security.
- Implemented a robust fallback concept for CDISC ingestion, guaranteeing backup file availability in the system.
- Developed a comprehensive back-end for Manage Business Rule with full support for CRUD operations, improving data management capabilities.

Programmer Analyst

Cognizant Technology Solutions Pvt. Ltd

Jul 19 to Oct 21

We focus on helping clients modernize their businesses by leveraging digital technologies. Our primary aim is to assist organizations in transforming their business, operating, and technology models to better meet the demands of the digital age.

PROJECT SUMMARY

Forms Navigator

Role Type : Front-End Developer

Client : AIG

Tools used : React.js, React hooks, Redux toolkit, React Router, CSS Module, Typescript, .Net Core 3.1, Entity Framework, JSON Web Token

Highlights :

- Completely restructured the application using functional components and React hooks.
- Created a compatible, custom client dashboard, reducing support tickets by 30%.
- Maintained states in stores and dispatched actions via Redux Toolkit.
- Integrated server-side and client-side using REST API.
- Applied optimization techniques to reduce page size and load times, enhancing user experience through Lazy Loading and Memoizing techniques.

Software Engineer

Pranav Softsol Private Limited

Apr 19 to Jun 19

Pranav Softsol Private Limited, located in Coimbatore, is a leading software development company specializing in innovative IT solutions and services. They offer high-quality software

products, custom application development, and comprehensive IT consulting. The company leverages cutting-edge technologies to drive business growth and efficiency.

PROJECT SUMMARY

Municipal Utility Billing software

Role type : Web application designer

Client : US based client

Tools used : HTML5, JavaScript, CSS3, MVC, .Net

Highlights :

- Developed the application using MVC architecture.
- Created engaging and responsive user interfaces.
- Learned and integrated the Model and Controller portions with the view.

Web Application Developer

S.P.Apparels Ltd., ITD

Feb 17 to Mar 19

S.P. Apparels Ltd leverages advanced IT systems to streamline manufacturing processes and enhance supply chain efficiency. Their robust IT infrastructure supports real-time data analysis and decision-making. This integration ensures high-quality control throughout production. Overall, it contributes to operational excellence and a competitive edge in the apparel industry.

PROJECT SUMMARY

Cutting Module for Garment Sector

Role type : Web application developer & back-end developer

Client : Cutting Dept. (In House)

Tools used : ASP.NET, ADO.NET, VB.NET, SQL, .NET 3.5, Crystal report, Ajax control toolkit, Report viewer, JavaScript, CSS3

Highlights :

- Designed intuitive and user-friendly interfaces to enhance user experience.
- Developed complex procedures, views, and functions to efficiently retrieve data from the back end.
- Created professional delivery challan printouts in PDF format using Crystal Reports.
- Successfully implemented a comprehensive inventory management system under management guidance.
- Generated detailed quantity analysis reports to drive productivity improvements.
- Integrated automated email functionality to streamline communication with suppliers during job order approvals and delivery challan issuance.
- Delivered accurate stock reports in Excel format using Report Viewer, accelerating the order fulfillment process.
- Implemented fabric reconciliation processes to minimize unnecessary fabric usage and reduce costs.

- Automated data capturing processes to save significant time and effort for Time and Action (T&A) personnel.
- Ensured data consistency and integrity through the use of ADO.NET transactions.

E-Way (Electronic Way) Bill Script Generator

Role type : Web application developer & back-end developer

Client : Fabric and cuts stores (In House)

Tools used : ASP.NET, ADO.NET, VB.NET, MSSQL, .NET 4.5.1, JSON.NET

Highlights :

- Designed and implemented user-friendly interfaces with advanced paging concepts to improve navigation and user experience.
- Developed and optimized stored procedures for efficient data retrieval from all commodities, enabling accurate calculation of goods' values including tax.
- Integrated the JSON.NET framework to automate the preparation of JSON files for government website uploads, facilitating the generation of E-way bill numbers and significantly reducing manual data entry.
- Proactively maintained and updated the JSON schema in alignment with government site releases, ensuring compliance with the latest standards.
- Introduced robust controls in all delivery challans to accurately determine the necessity of E-way bills, thereby mitigating tax-related issues and ensuring regulatory compliance.

Web Signature

Role type : Web application developer

Client : Human Resource Dept.

Tools used : ASP.NET, VB.NET, HTML5, JavaScript, CSS3

Highlights :

- Designed a user interface to capture signatures using HTML5 canvas element and JavaScript.
- Implemented the ability to change ink color.
- Enabled online document signature feature.
- Reduced paper and printing costs.
- Replaced the traditional paper-based approval process.
- Ensured ease of use in applications requiring web signatures.

Electronic Document Management System

Role type : Web application developer and back-end developer

Client : Human Resource Dept.

Tools used : ASP.NET, ADO.NET, VB.NET, HTML, JavaScript, CSS, Crystal Report, SQL

Highlights :

- Converted physical documents into byte streams and efficiently stored them in the database using ADO.NET, ensuring data integrity and accessibility.
- Designed and generated comprehensive reports using Crystal Reports, facilitating better data visualization and decision-making.

- Increased storage efficiency by transitioning from physical to digital paperwork, significantly reducing physical storage requirements.
- Enhanced operational efficiency by improving document retrieval timelines and search capabilities, leading to faster access to critical information.

Framework Conversion

Role type : IT Infrastructure analyst

Client : ITD

Tools used : .Net framework 4.5.1, Crystal report 2014, IIS, Window server 2012 R2

Highlights :

- Effectively utilized connection pooling and cookie-less sessions to enhance performance.
- Upgraded .NET framework from version 3.5 to 4.5.1 to leverage new features.
- Transitioned from Windows authentication to form authentication to prevent unauthorized access to secured pages.
- Implemented query string encryption and decryption to secure data transfer between modules.
- Configured IIS to host web applications and created application pools to isolate modules such as production, stores, and HR, increasing availability.
- Installed Crystal Reports 2014 for designing invoices, delivery challans, and official documents.

TECHNICAL SKILLS

Front End

HTML5, JavaScript, TypeScript, CSS3, React.js, Next.js, React Router, React Hooks, Jest, MUI Components

Back End

FastAPI, SQLAlchemy, PingFederate Authentication, Pytest, Node.js, Express, Sequelize, .Net 5, .Net Core 3.1, ASP.NET, ADO.NET, ASP.NET, ASP.NET AJAX Control toolkit, Entity Framework, JSON Web Token, Crystal Report, Report Viewer, Active PDF toolkit, Multer, Mongoose, OIDC

Database

Postgres, AWS Neptune, MSSQL, Oracle 11g, Oracle 12c, Sqlite, MongoDB

Languages

TypeScript, JavaScript, Python, SQL, Gremlin, c#, vb.net

IDE

Visual Studio Code, DBeaver, Postman, Visual Studio 2017 & 2013, SQL Navigator, SQLite Studio, SQL Management Studio, AWS Neptune notebook

Cloud

AWS Certified Cloud Practitioner, AWS Certified Developer Associate

Code Quality

SonarQube

Collaboration Tools

GitHub, Bitbucket

EDUCATION

Info Institute of Engineering

2012 – 2016

- Bachelor of Engineering – Electronics and Communication Engineering
- GPA: 6.6%

LANGUAGES

LANGUAGES	LEVEL
Tamil	Native proficiency
English	Professional working proficiency

Declaration

I do hereby confirm that the information given above is true to the best of my knowledge.
(Premkumar Krishnan)