

Samith K S

LEAD ENGINEER · BACK-END DEVELOPER

Thrissur, Kerala, India

☎ +91 9446900436 | ✉ samithsarasan@gmail.com | 📷 samithks | 🌐 samithks

Skill Set

Languages	Typescript, JavaScript, HTML, CSS , Python
Front-end	Vue.js
Datastore	PostgreSQL, MySQL, MongoDB, Redis, InfluxDB
Back-end	Node.js, Express, NestJS, Loopback, TypeGraphQL
Platform	AWS, Azure, Heroku, Github, Bitbucket, Gitlab
Tools	Hasura GraphQL, Keycloak SSO, CubeJS, Auth0, LaunchDarkly, Docker

Work Experience (7 yr 10 mon)

Colabra Inc

San Francisco, California, USA

SENIOR SOFTWARE ENGINEER

Jan 2023 - Current

- Worked as full stack developer experienced in working collaboratively with developers in an asynchronous culture.
- Skilled in authentication and authorization, with a strong background in optimizing file uploads.
- Independently developed an Analytics page using CubeJS and Google Charts, showcasing abilities in data visualization and integration.

Qburst

Trivandrum, Kerala, India

LEAD ENGINEER

Mar 2021 - Dec 2022

- Successfully re-architected and bootstrapped unmanageable code into a mono repo, resulting in a 10% reduction in backend work while enabling code reusability and scalability.
- Designed and built a highly efficient gRPC-based microservice for a telecom-based web application, resulting in the caching of multi-step customer workflow states and a significantly enhanced user experience.

Performatix Solutions Pvt Ltd

Trivandrum, Kerala, India

LEAD ENGINEER

Sep 2019 - Mar 2021

- Architected a real-time resource planning platform for project planning, team capacity, and hiring needs, leveraging Cube.js for analytics, Docker for containerization, Keycloak for Single Sign-On, and Hasura for API creation.
- Designed and implemented the backend architecture and data model for a dynamic content-sharing social networking platform, utilizing AWS Elemental MediaConvert, CloudFront, and Amazon S3 to ensure seamless video playback and high user engagement.

SENIOR SOFTWARE ENGINEER

Mar 2017 - Sep 2019

- Led the design and implementation of a data ingestion pipeline for a web application featuring a resource monitoring dashboard and actionable insights generated from IoT data. Integrated an ML service for prediction and anomaly detection, resulting in a highly effective solution.
- Developed efficient backend APIs for IT service management tasks, integrating event monitoring, management, and machine learning for actionable analytics using Express, LoopBack, MySQL, Kafka, and Redis

Kottackal Business Solutions Pvt Ltd

Trivandrum, Kerala, India

CONSULTANT TRAINEE

Jul 2016 - Feb 2017

- Developed backend APIs for an insurance web application, with a focus on claim management for flight travel delays using EthereumJS, Solidity, and Truffle smart contracts.
- **Technical Skills:** NodeJS, Express, Angular, Embark, Solidity, MongoDB

Microclouds

Malpuram, Kerala, India

SOFTWARE ENGINEER

Jun 2015 - Jul 2016

- As a Web Developer, I have made significant contributions to numerous front-end development projects, involved in all stages of static web projects, from initial conception to final deployment.
- **Technical Skills:** Foundation, Bootstrap, Saas, Less, Nunjucks, HTML5, CSS3, JavaScript, jQuery.

Cherrylabs Technology (P) Ltd

Bangalore, Karnataka, India

SOFTWARE ENGINEER

Mar 2013 - Aug 2013

- Worked as a developer in Integrated Business Continuity Dash-Board a SaaS based product.
- **Technical Skills:** Liferay, Java, JSP, Hibernate and PostgreSQL.

Education

Calicut University

Kerala, India

MTECH IN COMPUTER SCIENCE AND ENGINEERING

2013 - 2015

- Winner of GATE Scholarship. Secured Distinction

Key Projects

R&D workflow visibility platform

Colabra

POSTGRESQL, CUBEJS, HASURA, NODE.JS, EXPRESS, TYPESCRIPT, AZURE, VUE.JS, UPLOADCARE, LAUNCHDARKLY

- **Summary:** A platform simplifies tracking, documenting, and organizing lab work with an intuitive interface that improves project visibility and enables better collaboration. Its features increase productivity and streamline lab processes.
- Experience in Hasura authentication and authorization with Auth0, developing analytics page using Vue.js and Google Charts integrated with CubeJS, and optimizing file uploads.

Telecom Service Platform

Qburst

EXPRESS, NESTJS, REDIS, AWS, LERNA, GRPC

- **Summary:** A telecom vendor web application that enables customers to perform various services, including recharging, changing pin, requesting technical support, and submitting identification documents.
- Led the re-architecture and bootstrapping of the application into a mono-repository, which resulted in improved code reusability and scalability across multiple countries.
- Implemented various code quality tools and clean coding principles to enhance codebase readability and scalability, resulting in a more streamlined development process.
- Managed the expiration of fields within Redis hashes, despite the limitations of TTL only being able to be set at the key level.

Resource Planner

Performatix

NESTJS, REACT, HASURA GRAPHQL, TYPEGRAPHQL, CUBE.JS, KEYCLOAK SSO, PASSPORT.JS, POSTGRES

- **Summary:** A productivity platform for professional services that provides real-time insights to help teams confidently plan projects, manage team capacity, forecast budgets, optimize team utilization, and make informed hiring decisions.
- Contributed to feature discussions, integrated Cube.js for analytics, dockerized services, created GraphQL and REST APIs, and handled application design and database modeling.
- Implemented Keycloak authentication, including authentication hooks in Hasura and Cube.js for force logout.

A Mobile Platform to Upload Short Videos

Performatix

NODE.JS, LOOPBACK, AWS ELEMENTAL MEDIA CONVERT, AMAZON CLOUDFRONT, AMAZON S3, AWS LAMBDA, MYSQL

- **Summary:** A mobile application for uploading or recording short videos, with features such as liking, commenting, sharing, and chat functionality.
- Designed and data-modeled an application architecture for a scalable video sharing platform that includes features such as file storage, video streaming, and email notifications.
- Developed a storage service that utilizes Amazon S3 to upload and download files, and integrated video streaming using AWS Elemental Media Convert, AWS Lambda, Amazon S3, and Amazon CloudFront for optimized content delivery.
- Implemented an email service using AWS SES to ensure seamless communication and user engagement.
- Utilized PM2 clustering for improved performance and reliability of the application.

Smart Water Monitoring System

Performatix

NODE.JS, TIMESCALEDB, LOOPBACK, PYSPARK, IOT HUB, MONGODB, REDIS

- **Summary:** A water usage monitoring system, which receives data from IoT based smart water meters and processes the data to make ML based predictions for leak detection.
- Ensured Role-Based Access Control to protect sensitive data and created APIs with LoopBack for efficient communication between the application and users.
- Conducted data modeling for a NoSQL database, streamed data from IoT devices via IoT Hub, transformed data with PySpark, employed API caching for better responsiveness

Unified Monitoring and Event Management

Performatix

EXPRESS, LOOPBACK, MYSQL, KAFKA, REDIS

- **Summary:** The application integrates event monitoring, management, and machine learning to deliver actionable analytics for IT operations, enabling efficient management of intricate IT environments.
- Collaborated with clients to design data models and application architecture to meet their requirements.
- Employed a high-velocity development process with continuous product releases to ensure timely delivery of new features and improvements.
- Developed REST endpoints and effectively managed deployment processes using LoopBack and Strong-PM to optimize the application's performance and scalability.

Awards

Performatix Solutions Pvt Ltd 'Employee of Month' - Twice (2017) || 'Best Project of the year' - 2017

Languages

English Professional proficiency
Malayalam Native proficiency

References available upon request.