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**PROFESSIONAL SUMMARY\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* With over 20+ years of experience as an architect, engineering manager, and full stack developer, I have successfully delivered multiple technology projects for various clients and domains. As a Senior Engineering Manager at Smartmatic, I lead a team of 10+ software engineers, ensuring high-quality and timely delivery of software solutions for election management, digital identity, and smart cities.
* I have a strong background in project management, agile methodologies, software architecture, and design. I have extensive experience in planning, estimating, designing, developing, and delivering complex and scalable web and mobile applications. I also have a keen interest in innovation and entrepreneurship.
* Providing and building practical solutions for complex business problems applying appropriate technology stack.
* Life time learner and works constantly to keeps myself current on latest technologies.
* strong hands-on technical expertise combined with solution-building skills and business acumen across industries has enabled him reliably and repeatedly deliver high quality technology products & platforms. Murugan has been successful in building strong, motivated, diverse and inclusive teams to drive superior outcomes at low cost and quick speed to market.
* Defining and building solution and marketing collateral, develop pursuit plan, and deliver advisory methodologies
* Rich experience in working with cross functional teams and adept to multi-cultural environments
* Providing IT Strategy and Architecture services to clients and working on Mainstream technology --- Cloud, PaaS, Iaas, Data Center Transformation, Engineered Systems and enabling business integration using service oriented architecture (SOA), business process management (BPM), and business process transformation in Highly Available, Multi-Tier, virtualized FMW environments following best practices and reference architecture
* Defining and building solution and marketing collateral, develop pursuit plan, and deliver advisory methodologies
* Directing large, cross-functional teams, managing budgets, leading resource planning efforts, evaluating vendor solutions, helping new talent acquisition, presenting new ideas, solutions to complex business needs and product roadmaps to high-ranking.
* Mentor Team members and given organization level training.

**TECHNICAL SKILLS\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

* Java/J2EE
* GoLang
* Python
* Trino
* Amazon Web Services
* Apache/Tomcat
* Ansible
* Ngnix
* HTML/CSS
* Rest API/JSON
* Node.js
* GraphQL/Apollo
* React/Redux
* Javascript/TypeScript
* Spring / Spring Boot
* Jenkins CI/CD
* Docker
* Flutter/Dart

**PROFESSIONAL EXPERIENCE:**

**Applied Thought/Viasat inc,** CA

 **01/2018 to 10/2023**

**Technical Staff**

**Roles and Responsibilities:**

* Engineered in-house metrics collection system using Java Spring/Springboot, xMatters, and Slack, using Apache Kafka for streaming metrics
* Successfully fulfilled main requirement by developing in-house solution for monitoring and alerting across on-prem servers and AWS using cloud services like S3, ECS, EC2, Lambda and Route53 and API Gateway, maintaining its use for over 5 years.
* Utilized Kafka/databus for queuing metrics, integrating Grafana dashboards to provide real-time insights into server statuses, including memory and disk utilization.
* Independently managed 30 Raspberry Pi-based IoT clients, playing pivotal role in collecting video Quality of Experience (QoE) metrics to infer SLOs improve satellite networks, enhancing video streaming quality
* Enhanced metric quality by transitioning to Rasbian OS to 64-bit for all IoT clients using AWS IoT remote jobs.
* Leveraged AWS IoT core remote jobs, creating custom software upgrade and installation templates for seamless remote maintenance and updates on Raspberry Pi devices. Implemented alerting mechanism using xMatters and Slack for offline detection of AWS IoT client remote agents. Leveraged AWS IoT device SDK for secure browser-based SSH connections, aiding in remote debugging.
* Engineered a build pipeline using Jenkins CI/CD and Ansible scripts for different environments to deploy docker containers to on-prem servers.
* Maintained AWS Lambda functions responsible for collecting and storing metrics in AWS Timestream, employing AWS Layers to manage lambda dependencies effectively.
* Engaged in developing and fixing server-side code with GoLang, that manages routing of wireless traffic and flows.
* Led a 5-member offshore team of 5 people in the offshore team in designing and developing an automated build system using Git/Ansible/Jenkins CI/CD. Participated in on-call routines.
* Exposure working on graphQL queries with a MongoDB backend that stores subscriber traffic flow and configuration.
* Pursued personal development by taking courses in GoLang, Flutter, and Dart, with keen interest in initiating future projects with these technologies.

**Environment: Java, Springboot, Apache Kafka, AWS, Jenkins,Golang,GraphQL.**

**Oracle America, San bruno, CA 04/2013 to 06/2015**

**Senior software engineer**

**Roles and Responsibilities:**

* Participating in design discussions with team and contributing to core design of product, creating design documents after finalizing design
* Designing database table structures with core focus on normalization and creating indexes and partitioning on frequently accessed tables
* Enhanced Web Retargeting Service event collector backend with various features and added sophisticated features like encryption, data handling on multiple servers, data batching, data archiving and file based configuration
* Involved in developing and maintaining a front-end for the Web retargeting service using React/Redux. The user interface was used to view different metrics and setup javascript tags for different clients.
* Handling on-boarded clients in helping them with setup and resolving JavaScript tag issues.

**Environment:** J2EE, Spring, React/Redux.

**Tellabs Inc- Santa Clara, CA 11/2009 to 01/2012**

**Staff Engineer:**

* Acquiring requirements based on what the customer needs and implementing that on framework, design and development of various User interfaces using Java Swing and Writing interface object that interact with the database
* Participating in design and QA discussions on various use-cases that will be covered in development and testing
* Developed Bootstrap applet for configuring java policy restrictions for applet client that can work across different flavors of Windows Operating systems.

**Environment**: Java, Springboot, Apache Kafka, AWS, Jenkins,Golang,GraphQL.

**Angel Consultants , Chennai ind \_\_\_\_\_\_\_\_\_\_\_\_\_ 08/2007 to 09/2008**

**Consultant :**

**Roles and Responsibilities:**

* Played an active role of that of a developer and tester, participating in both server side and client side development activities for all the modules.
* Developed a feature called 'Hierarchical Maps', in which the maps are dynamically created based on the values in the ManagedObject field.
* The field names and the delimiters for the value are configurable via an xml file.

**Environment: J2EE, Spring, React/Redux,XML.**

**AdventNet Inc, Chennai,India \_\_\_\_\_\_\_\_\_ 09/2003 to 08/2007**

Senior Software Engineer.

* I Was involved in design and development of below features with AdventNet WebNMS Platform, which includes: Threshold Profile Configuration, Subscriber Templates, Software Management, Licensing Mechanism, ONT Provisioning
* Solved various issues after development phase
* Participated in Testing phase of the product.
* Provided Technical support and Training to Hitachi Communication Technologies, Japan for a period of about 4 months.
* Led a team of 5 members through the process of design, development, testing and generated web application, guiding the team on server side and UI usability
* I Was responsible for conducting regular team meetings and interacted with clients on a regular basis to give status updates on development and conduct discussions pertaining to feature developments, responsible for assigning development and testing tasks to team members and check to see if task gets completed on time.

**Education**

**B.Sc., Mathematics, 10/1998, University of Madras - Chennai, India.**