

MANIKANDAN GANESAN

Principal Engineer with 7+ years of experience in SysCloud, having a proven track record of designing and developing highly scalable web apps from the ground up.

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SUMMARY

Designed and Developed an "Security" application called, *Data loss prevention and Compliance* from scratch. It is a highly scalable, modern *SaaS cloud analysis tool* that provides visibility into your GSuite and O365 accounts, *detect insider and outsider threats in real-time* through various user created and predefined policies.

Own the product lifecycle from initial concept to delivery. Skills included: *Technical Product R & D, Product Roadmaps, Requirements Gathering & Analysis, Product lifecycle management, Agile/Scrum methodologies, Test Driven development, Deployment Plans, Troubleshooting and debugging.*

Responsible for *creating an infrastructure in different cloud platforms* and making decisions on deployment plans to scale the application.

Write *server-side code for web-based application modules*, create fast, easy-to-use, high volume production applications, Work on strategic initiatives on technology selection, develop prototypes, and process improvements.

Contribute to engineering efforts from planning and organization to execution and delivery *to solve complex engineering problems.*

Mentor and manage a team of software engineers. Coordinate between 4 teams and ensure the delivery of features in a product with high quality.

Knowledge of professional software engineering best practices for the full software development life cycle, including *coding standards, code reviews, source control management, build processes, testing, and operations.*

Working closely with the sales team. Collect inputs from customers, going through an iterative development process by introducing new features in the application. *Good exposure in emergency handling of customer issues.*

Build a dynamic *rule engine* packed with algorithms to detect *Ransomware and Phishing threats*. This becomes a unique selling point for the product.

Developed a workflow framework to make code reusable and more abstract. Published it as a library. utilized by other parts of microservices.

Build *ML algorithms* for compliance policies *PCI, FERPA, HIPAA, Individual Educational Plans and other students safety policies like Life Threats, Cyberbullying, Objectionable contents etc...).* It will *remove false positives*, from the notification sent by the application for domain Administrators.

Implemented *logging models* with frameworks like *monologger, Winston* for the observability of a whole

application using ELK Stack. Which helps to assign and troubleshoot the bugs to appropriate Stakeholders.

Trainings I Conducted

Product workflow training will be conducted for every new engineer joining in Syscloud. Identify the skill set, train and place him/her in appropriate modules in a project.

Infrastructure as Code and maintenance in AWS. includes workflow automation with predefined services like CI/CD, Lambda etc.. and methods to create deployment plans.

Mentoring junior engineers to write *Clean Code*. includes how to write *human readable code, follow design patterns to achieve maximum abstractions, Implementation of complete error handling, practice test driven developments.*

Insist and practice developers to follow *Aspect Oriented Programming(AOP), includes logging, security, caching and separation of concerns to achieve modularity.*

Guide developers in *microservice* designing, environment isolations with *Docker containers* and run serverless patterns like AWS Fargate and Lambda, which is suitable for our infrastructure.

Trainings Obtained

Training helps me to do better architectural design, scaling, optimizations and provides better visibility to the system for troubleshooting.

[DevOpsCon, Munich, Germany](#)

[Linux Hackfest, Bangalore](#)

[AWS Serverless WorkShop, Chennai](#)

[AWS Security WorkShop, Chennai](#)

[Microsoft Azure WorkShop, Bangalore](#)

Technologies I specialized

[Frontend Tech](#)

HTML5 , CSS 3, VUE, VUEX, Material Design

[Backend Tech](#)

NodeJS, PHP, Express, NESTJS, SQL Server, MongoDB, PostgreSQL, REDIS, ELK Stack, Dockers,

Microservices, NGINX, Apache, GraphQL, JEST

[Cloud Platforms & Dev Tools](#)

AWS, Azure, LINUX, WINDOWS, GIT, VSCode, NetBeans

7+ years of experience in SysCloud

SysCloud, US based company. Our software protects businesses and educational institutions from data loss and cyber threats like Ransomware and Phishing, while using office collaboration suites like Google G Suite and Microsoft Office 365.

Roles and responsibilities in SysCloud

Principal Engineer

SysCloud

08/2018 - Ongoing
Chennai

- Lead backend developer for the technical team and successfully delivered many new features for the product.
- ***Ransomware and Phishing detection feature*** designed & implemented by me was highly successful and was the most widely used feature by our customers.
- Implemented ***Redis Cache clusters*** in our applications, which helps us to ***reduce the DB performance issues, provides best user experience***.
- Developed infrastructure to standardize ***log file collection and analysis*** across products.
- Involved in several ***API migrations***. and ***converting the monolithic application modules into microservices***.
- Get ***involved in code reviews***. Ensure following best practices and validate coding algorithms to improve efficiency.
- Responsible for ***handling and responding to customer tickets***. Work with the Sales team, talk to customers and do iterative development.

Lead Engineer

SysCloud

08/2017 - 08/2018
Chennai

- As a lead backend developer for the product development team, I was responsible for designing and developing highly reusable Components for the product.
- ***Developed a workflow framework*** to make code reusable and more abstract. Published it as a library. utilized by other parts of microservices.
- Migration of application from ***legacy server deployments into modern techniques*** with one-click deployment by creating ***Docker builds, GIT and CI/CD tools and pipelines***.
- Responsible for implementing ***automation workflows for AWS deployments and infrastructure cost reduction***.

Senior Software Engineer

SysCloud

08/2015 - 08/2017

Chennai

- Implemented *Machine learning algorithms to increase the accuracy* of these policy results produced by application. which reduce the false positives alarms and increase the true positives.
- Achieved *auto scaling* with every part of the application.
- *Monitoring the patterns* after deployment and *fine tuning the scaling policies* of each service running in AWS Cloud.
- Introduced *environment isolation using Docker containers*, implemented with *AWS ECS EC2 and Fargate*. Which helps us to *move towards serverless architecture*.

Software Engineer

SysCloud

06/2013 - 08/2015

Chennai

- Started the design and development of *"Security DLP and compliance" application from scratch*.
- Implemented an *dynamic rule engine packed with algorithms*, It will work with GSuite and O365 REST API services, helps to scan user data, log and notify violations in real time for domain Administrators.
- *Implementation of webhooks* to listen to the changes done by the users, catch them and scan in real time.
- Involved in AWS *EC2 server migrations* from Windows environment to Linux.
- *Designing the database tables*, Queries with senior engineers, writing stored procedures for retrieval of data. And do enhancements by making changes in indexes, triggers and Jobs.