

JITHENDRANATH GUPTA YENDURI

Software Architect

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Summary

Experienced Software Architect with a decade of expertise in full-stack development, building scalable applications across frontend and backend. Played a key role as an early engineer in multiple startups, setting up end-to-end software development pipelines from coding to deployment. Skilled in designing reusable components and middleware layers to handle millions of requests efficiently. Passionate about building high-performance systems and driving innovation in software architecture.

SKILLS

Programming Languages: Node.js • JavaScript • Golang • Python • Java • AngularJS • React • Typescript • Flutter

Cloud Platforms: AWS Google Cloud and Azure

Frameworks: MEAN GraphQL REST

Databases: PostgreSQL MongoDB Amazon S3 Amazon Redshift Neo4j Memgraph Redis

Tools: Git Docker Jenkins Kubernetes

AI Integrations: Open AI

EXPERIENCE

Uptycs

Waltham, United States

Software Architect

03/2017 Present

Cloud Resource Risk Discovery & Identification AWS/GCP

- **Designed an attack path analysis mechanism** to **trace the blast radius** of risky cloud resources using **cloud resource relationships**.
- Developed mechanism for seamless front end development, built 10+ high performance UI pages with react.js and Redux.
- **Built a graph-based visualization** using **Memgraph Graph Database**, enabling efficient tracking of resource dependencies and potential attack paths.

Reduced customer evaluation time by 50%, enabling **faster discovery** of cloud resources and **prioritization of misconfigured assets** and **Improved security response** by providing a **clear, visual representation of attack paths**, allowing proactive risk mitigation.

Cloud & Endpoint Detection Engine

- **Developed a Cloud & Endpoint Detection Engine** to **detect, correlate, and respond** to security threats across cloud and on-prem environments.
- **Built an endpoint detection system** that **correlates process ancestry signals** from servers to **detect malicious activities**.
- **Designed and Integrated** the **MITRE ATT&CK framework** and **optimized caching with Bloom Filters** to **enhance detection accuracy and efficiency**.

Reduced AWS EC2 compute costs by 60% while improving detection accuracy and customer satisfaction.

Authentication and RBAC Authorization Project

- **Engineered and implemented a comprehensive enterprise-level authentication and authorization system** with **role-based access control RBAC**
- **Developed a unified authentication framework** supporting **OKTA, SAML, password-based authentication, and LDAP integration** to accommodate diverse enterprise needs.
- **Designed and launched critical RBAC components**, including **Security Zones, Access Levels, Role Hierarchies, and Environment-specific visibility controls**, to **enforce fine-grained access control**.

Streamlined customer onboarding, reducing implementation time by 40% while significantly enhancing security protocols.

EXPERIENCE

Gainsight

Senior Software Engineer

Bangalore, India

07/2015 03/2017

Amazon S3 Integration

- **Developed and integrated a scalable Amazon S3 data ingestion system**, enabling **automated and efficient data extraction** using backbone.js
- **Spearheaded** the development of **robust APIs** for **automated data extraction from Amazon S3**, supporting both **on-demand and scheduled data collection**.
- **Engineered** an **intuitive user interface** to **simplify integration configuration and permission management**, improving usability.
- **Designed** a **scalable integration framework**, seamlessly incorporating **Mixpanel, Google Analytics, and Segment IO** for **comprehensive data processing**.

Automated the data ingestion process, eliminating 100% of manual effort.

Kaybus

Software Engineer

Bangalore, India

08/2014 06/2015

ClickStream Analytics Application

- **Developed a ClickStream Analytics Application** to **track user interactions, analyze engagement patterns, and generate actionable insights** for product optimization.
- **Designed and implemented a standardized event tracking framework** with **MongoDB integration**, enabling **granular capture of user interactions**.
- **Orchestrated analytical data processing workflows using PIG Latin**, ensuring **efficient daily aggregation and reporting** of user activity.
- **Built an admin app** using Angular 1.x which helps to create customers, look at usage and solve 10 internal needs.

Enabled targeted product upsell opportunities and optimized underperforming features by providing actionable insights for product enhancement decisions.

OPEN SOURCE CONTRIBUTION

- | | | |
|--|--|---|
| <input type="checkbox"/> EPSS Score Chrome Plugin
Contributed to the development of the EPSS Score Google Chrome plugin, providing users with <u>real-time exploit</u> prediction scoring for improved security decision-making. | <input type="checkbox"/> Passport SAML SAML Authentication for Node.js
Improved SAML-based authentication in Passport by contributing fixes <u>GitHub Link</u> | <input type="checkbox"/> Pacu AWS Exploitation Framework
Enhanced the open-source AWS exploitation tool by fixing critical issues. <u>GitHub Link</u> |
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Publications

ScienceDirect – Identifying phishing websites and its target

<https://www.sciencedirect.com/science/article/abs/pii/S2214212616303118>

IEEE Expore – <https://ieeexplore.ieee.org/document/7050816>

A study to assess and enhance educational specific search on web for school children

Education

Amrita Vishwa Vidyapeetham

B.S., Computer Science | GPA: **8.87** / 10

Coimbatore, India

2010 2014