

# 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



#### EPSS Score Chrome Plugin

Contributed to the development of the EPSS Score Google [Chrome plugin](#), providing users with real-time exploit prediction scoring for improved security decision-making.



#### Passport SAML - SAML Authentication for Node.js

Improved SAML-based authentication in Passport by contributing fixes [GitHub Link](#)



#### Pacu - AWS Exploitation Framework

Enhanced the open-source AWS exploitation tool by fixing critical issues. [GitHub Link](#)

## 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