

PUNID RAMESH NATESAN

Los Angeles, USA

✉ punidramesh@gmail.com
🐙 <https://github.com/punidramesh>
🌐 <https://linkedin.com/in/punid>
🌐 <https://punidramesh.tech>

A pragmatic backend developer with a keen interest in system design and creating scalable architectures. Currently seeking opportunities in this domain.

EDUCATION

University of Southern California

Master's in Computer Science

Los Angeles, USA

Aug 2023 – Present

Vellore Institute of Technology

B.Tech ECE with Specialization in IoT and Sensors; GPA: 9.16

Vellore, India

Jul 2018 – Jul 2022

EXPERIENCE

Hewlett-Packard Inc.

Cloud Engineer 1

Bangalore, India

Jul 2022 - Jul 2023

- Developed a microservice within the HP Smart Portal, enabling the provision of printer ink supplies shadow data by leveraging telemetry events from non-NPI printers.
- Demonstrated a processing capacity of **800,000** printer ink supplies telemetry events per hour via E2E load testing
- Identified root cause and mitigated printer shadow data loss due to race condition while DynamoDB updation
- Performed horizontal pod autoscaling adoption analysis for **5** microservices, coupled with load testing to minimize infrastructure costs
- Tools:** *Springboot, AWS Kinesis, SQS, DynamoDB, Lambda, Terragrunt, Apigee, SonarQube, Docker, Splunk*

RnD Intern

Feb 2022 - Jun 2022

- Implemented distributed tracing of platform microservices using OpenTelemetry for enhancing observability
- Developed a web portal for platform solutions to manage API usage data by upgrading the existing process done using sheets
- Tools:** *OpenTelemetry, AWS EC2, ELB, RDS, Zipkin, Spring Boot, React, MySQL, Docker, Terragrunt, Splunk*

Reliance Jio

Software Engineer Intern

Bangalore, India

Aug 2021 - Jan 2022

- Designed, architected, and developed an OPC-UA based backend solution for Energy Metering
- Demonstrated scalability via Kubernetes and Kafka, tested up to **200,000** concurrent devices
- Tools:** *Kubernetes, Docker, Kafka, MongoDB, Javascript, OPC-UA, CoAP, Shell Scripting*

PROJECTS

🐙 Morax

Python, Click, Flask, OAuth2.0, Coinbase APIs, Heroku

- A CLI tool to view Coinbase wallet data fetched using Coinbase APIs, authenticated over OAuth 2.0

🐙 Artemis

Bootstrap, Django, PostgreSQL, Heroku

- A website that provides real-time data on the spread of the Coronavirus

SKILL SET

Languages: Java, Python

Technologies: Spring Boot, Kafka, Docker, Kubernetes, AWS Kinesis, DynamoDB, Lambda, SQS, PostgreSQL, React, MongoDB

CERTIFICATIONS

AWS Certified Solutions Architect - Associate: AWS Certification that validates cloud experience

Deep Learning Nanodegree: Nanodegree program for Deep Learning using PyTorch and AWS on Udacity