## THARUN GANAPATHI RAMAN

Washington, DC | tharunganapathiraman@gmail.com | +1 (202) 330 8198 | https://www.linkedin.com/in/tharun-gr/

## **EDUCATION**

## The George Washington University, School of Engineering & Applied Science

Washington, DC

Master of Science in Computer Science - GPA: 3.80 / 4.0

May 2024

Expertise: Software Engineering, DevOps, Cloud Computing, Distributed Systems, Software Design and Architecture

#### CERTIFICATION

AWS Certified Solution Architect Professional

## **TECHNICAL SKILLS**

Programming Languages: Java, Python, C#, Golang, Typescript, Javascript, CSS, HTML

Cloud Technologies: AWS, Kubernetes, Docker

DevOps Technologies: Jenkins, AWS CI/CD, ECR, ECS, EKS, GitOps, ArgoCD, Ansible

Front-End Technologies: React.js, Angular, Flutter Back-End Technologies: Spring Framework, Node.js, .NET

**Database:** MySQL, MongoDB, Redis **Version Control:** Git, GitHub, BitBucket

## **WORK EXPERIENCE**

# The George Washington University

Washington, DC, United States

January 2023 - Present

# Software Technical Specialist III

- Led the development of a centralized control software system for devices such as projectors and audio equipment, deployed across five campus locations and over 800 university spaces
- Refined CI/CD pipeline using Jenkins, SonarQube, and Docker, enhancing deployment workflows and infrastructure scalability for Kubernetes via Argo CD
- Managed the project through regular code reviews, daily stand-ups, status meetings, and to ensure project milestones were on schedule

#### Ideas2IT Technologies Services Private Limited

Chennai, Tamil Nadu, India

Software Engineer

June 2021 - August 2022

- Developed healthcare application systems to auto-detect and extract key medical concepts from unstructured patient reports, utilizing Spark NLP, OCR, and AWS S3, converting free text into structured data
- Designed and deployed 5+ backend microservices and 3+ frontend web components, leveraging event-driven microservice architecture to enhance patient records to support analytics, reporting, and Clinical Decision Support applications
- Streamlined deployment on AWS EKS with a custom VPC setup; orchestrated DevOps workflows and VPC security enhancements for optimal performance

# Full Stack Software Developer

June 2020 - May 2021

- Led the team of engineers to design and develop an edtech platform with distinct UIs for parents, partners, and cohort-based learning. Utilized Docker and Kubernetes for container orchestration, leading to increase in parent conversational engagement
- Crafted a bespoke video player using React Player for parent lectures, and implemented an appointment management module in the partner app for streamlined online and offline sessions

# Software Developer New Grad

June 2019 - May 2020

- Designed a tailored sophisticated analytics platform that streamlined data ingestion, cleansing, and transformation, enabling deep data exploration and the revelation of essential business insights
- Worked closely with cross-functional teams using Jira and agile methodologies; advocated for and incorporated feedback to improve team
  dynamics and product excellence

# **TECHNICAL PROJECTS**

#### Hey Serverless - Golang, Docker, Kubernetes, AWS, Git

November 2023 - Present

- Engineered a serverless system by integrated custom algorithms for dynamic auto scaling and fault tolerance, guaranteeing consistent performance under diverse load conditions
- Implemented event-driven autoscaling using AWS SQS and Lambda for optimal resource allocation and system efficiency
- Implemented PBFT with cache checks and automated AWS Lambda remediation for increased system reliability

## iHype 15 - Apache Kafka, Apache Spark, Amazon DynamoDB, Amazon QuickSight

January 2023 - May 2023

• Engineered a real-time sentiment analysis system for the iPhone 15 release, streaming tweets and articles into DynamoDB, leveraging AWS for data processing, and showcasing public perception via interactive QuickSight dashboards

# AI Sous-Chef Mobile App - Flutter, Dart

September 2023 - May 2023

• Developed an AI-enhanced recipe recommendation engine within a Flutter-based food app on both iOS and Android, targeting personalized content delivery, which included interactive meal planning and integrated video tutorials