**MOHITH RAJENDRA**

LOS ANGELES, CA-90007 **|** 213-265-2099 **|** mohithra@usc.edu | www.linkedin.com/in/mohithraj

**EDUCATION**

**University of Southern California** Los Angeles, USA

Master of Science - Computer Science (GPA 3.92) **Jan 2021-Aug 2022**

**R.V. College of Engineering** Bengaluru, India

Bachelor of Technology - Computer Science & Engineering (CGPA 8.48/10) **Aug 2013-Jun 2017**

**EXPERIENCE**

**Software Development Engineer 2 |VMware Jul 2018-Jan 2021**

* Built monitoring service data plane for *Cloud Health* improving service availability to 99.99% and the microservice was built on InfluxDB with telegraf agent.
* Implemented a service-mesh layer to manage inter-service traffic management for 68 microservices on Kubernetes cluster along with load balancing using *Ingress* and *ngnix*.
* Performed load testing on Heimdall and improved target request rate by 18%.
* Authored and led a team to optimize and standardize production rollout principles for rollouts hosted on Kubernetes. Python framework resulted in reduction of code by 84%.
* Developed data collections platform of productivity metrics on *MongoDB* to analyze, observe and resolve bottle necks in development cycle of 3 organizations with 380 projects.

**Software Development Engineer - 1 |VMware Jul 2017-Jun 2018**

* Designed *Self-healing* to classify root cause failures and act based on error category to heal continuous deployment flow using Bidirectional Encoder Representation from Transformers (BERT) in *PyTorch*, leading to a drop of on-call alerts by 32%.
* Constructed a self-serving UI platform for infra request of *Aurora, S3, RDS* and automated deployment of new services till production to eliminate code irregularities and save four person-hour/request.
* Created a change management system Web Application to manage deployments of dependent services and code integration of all microservices to minimize SLA of bug fix by 50% with *Apache Kafka*.
* Created infrastructure for seamless CICD on *AWS Kubernetes* to achieve push to production under SLA of 2 hours and lessen *Mean Time to Recovery* by 22%.

**Software Development Intern |VMware Jan 2017-Jun 2017**

* Created Kubernetes plugin to handle life cycle management of clusters, later published as *open source* by VMware
* Integrated with slack API to enforce code review practice across the organization.

**SKILLS**

* **Programming Languages:** Python, Java, C, C++, JavaScript­.
* **Databases:** MySQL, PostgreSQL, NoSQL, MongoDB, InfluxDB.
* **Technologies and Tools:** GCP, AWS, Azure, Kubernetes, Docker, Container, Kafka, Agile Methodologies, Spring, , Flask, REST APIs, Maven,Helm, Istio, Terraform, EKS, PyTorch, TensorFlow, NLP, Jira.

**PROJECTS**

**Checkers Playing AI agent**

* Implemented an agent based on AI algorithms of Searching and Minimax algorithm with Alpha-Beta pruning to play Checkers against any human or machine and maximize its expected utility.

**AI City Challenge**

* PyTorch YOLOv3 vehicle identification to eliminate manual classification of cars from mounted cameras using AWS SageMaker with mean average precision of 62%.

**Opinion Mining**

* Document level sentimental analysis on movie review comments of IMBD corpus with opinion prediction accuracy of 58%.

**ACTIVITIES**

* Published a paper under IJRTE (International Journal of Recent Technology and Engineering https://www.ijrte.org/wp- content/uploads/papers/v8i5s/E10070285S20.pdf
* Mentored a boot-camp project at VMware for new graduates of 2019 and achieved best project.
* Organized LGBTQ+ pride march as core committee member of hospitality group at VMware in 2018.
* Initiated Plastic Detox Online drive in VMware to remove single used plastics in office space 140kg.
* Completed Deep Learning, NLP, Artificial Intelligence: Principles and Techniques courses under Stanford Center of Professional Development as part of graduate certificate.