MOHITH RAJENDRA

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EDUCATION

University of Southern California — Los Angeles, USA
Master of Science - Computer Science (GPA 3.9) — **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.