GEO JOHNS ANTONY

RESEARCHER, DEVELOPER & DESIGNER IN SYSTEM & INFRASTRUCTURE

SKILLS

Research expertise Creative & Analytical Leadership & Engineering Communication

Strategic thinking

EDUCATION

IMT Atlantique, France

2021 - 2024

PhD in Distributed systems

Vellore Institute of Technologies, India

2018 - 2020

Master of Science and Engineering in Big data and data science

Christ University, India

2014 - 2018

Bachelor of Science and Engineering in Computer Science

CONTACT

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For more details:



Visit: https://goanto.github.io

PROFILE

Engineer and Researcher with over 5 years of experience in Research and Development within Computer Science. My expertise spans across Distributed Systems (Cloud, Edge & selfhosted Infrastructures) and Artificial Intelligence systems (Machine Learning & Deep Learning). My work consistently bridges these two domains, and I remain dedicated to staying current with them.

EXPERIENCE

Researcher (PhD) System & Ops - Inria, France 2021-2024

- Designed & developed a framework to geo-distribute any existing applications without code changes such as ecommerce, Text Editors and cloud apps.
- Geo-distributed Kubernetes and Openstack application externally without changing their internal codes & synchronized with a new CRDT and consensus like protocol across locations.
- Service meshes such as Istio and Consul was used to create an external communication channel between multiple locations.
- Created multiple pipelines for Kubernetes and Openstack application deployments with Ansible and terraform.
- Managed & supervised 10 interns and 2 engineers for the project while I designed and implemented the same.

MLOPS Engineer – Aividtechvision, India – Startup 2020-2021

- Created a MLOps platform for computer vision, supporting models like OpenCV, OpenVINO, PyTorch, and TensorFlow.
- The data consist of live video stream, which was stored in data lake, streamed via Kafka. Model training & inferencing API was on Kubernetes. Hybrid deployment on Cloud & Edge was used.
- Workflow automation from the developer side was done with Ansible that invoked github action scripts inside git repositories.
- Monitoring of these models was done with custom Prometheus scripts based on the use cases which is linked to Grafana.
- The platform exposed multiple model servings including TF serving, openvino, flask API on custom Kubernetes or K3s.

MLOPS Engineer - Reliance Industries, India 2019-2020

- Developed an MLOps platform for the Data Science team managing oil data. The data input was from data lake.
- I created a custom engine to run as a backbone for training models, hyperparameter tuning across various models & workflow orchestration on top of Kubeflow and airflow.
- The models exposed via PyTorch and TF serving. Highly available and robust serving system with Kubernetes was created.
- Implemented cost-effective parallel model training using Kubernetes & Openfaas framework with Docker containers.
- Monitoring of models and collecting logs was done with ELK stack i.e, Elasticsearch, Logstash, and Kibana on Kubernetes.
- I received best employee of the year award for my work.

Tools/Technology Experiences: Kubernetes, Openstack, K3s, Kubeedge, Kubefed, Kubeflow, Airflow, TF-Serve, PyTorch-Serve, K-Serve, NoSQL, MongoDB, CouchDB, Reddis, Antidote, S3, Minio, Hadoop, Spark, RabbitMQ, Kafka, Git, Gitlab Runner, Jenkins, Github, ELK stack, Actions, Argo, Python, Golang, AWS, Azure, GCP, Terraform, Ansible, Docker, Grafana, Prometheus, Anthos, Istio, Consul, Nginx, HA Proxy, CRDT, RAFT, Paxos, Bare metal servers, cloud & edge.