# Sarvesh Karandikar

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# **Education**

## University of Southern California

Graduated May 2020

Master of Science in Computer Science

Relevant Coursework: Natural Language Processing, Artificial Intelligence, Machine Learning, Deep Learning

#### SRM Institute of Science and Technology

**Graduated May 2018** 

Bachelor of Technology in Computer Science and Engineering

Relevant Coursework: Digital Image processing, Neural Networks, Semantic Web, Expert Systems using AI, Knowledge based Decision Support Systems

#### Experience

Cisco Systems Inc

Software Engineer July 2020 – Present

- Developed a robust functional response sanity script to prevent errors and oversights resulting from updates to the code.
- Expanded cloud networking solution (CAPIC) by integrating Google Cloud Platform (GCP) support and improved the existing configuration drift platform to accommodate service device chain configurations.
- Developed a versatile microservice capable of gathering resources from AWS, Azure, or GCP and generating Terraform templates for configuration. These templates are instrumental in conducting precise configuration drift assessments.
- Established another microservice that utilizes Binary Decision Diagram (BDD) modeling to comprehensively represent policy and security resources across AWS, Azure, and GCP. This framework empowers diverse analytical capabilities within the cloud network.
- Created an API simulator for AWS, Azure, and GCP for the cloud networking product to reduce cloud operational expenses.
- Currently focused on merging and integrating two separate controllers into a unified system, leveraging the existing Kubernetes infrastructure.

CircleLink

*Intern* May 2019 – August 2019

- Employed Named Entity Recognition (NER) models to identify and classify entities within loan documents, facilitating data extraction and ElasticSearch indexing. Enhanced the existing OCR-to-PDF model by fine-tuning and adapting it to recognize MICR formats on checks, streamlining loan tracking.
- Improved document management by creating an efficient search index for rapid data retrieval, optimizing the startup's loan management system.

USC Global Supply Chain Management

Wordpress developer and Technical Assistant

April 2019 – May 2020

- Designed, implemented and monitored websites for continuous improvement. Redesigned the website for a global supply chain summit event by adding sponsor information and managed and tracked all the technical requirements of the event.
- Wrote python scripts to automate the tasks of sending out email notifications through SendGrid APIs.

#### **Projects**

Advanced Image Synthesis with Deep Convolutional Generative Adversarial Networks (DCGAN)

October 2019

Developed a DCGAN in TensorFlow, generating high-quality images from random noise using CIFAR-10 data. Optimized performance with convolutional layers, batch normalization, and adversarial training, managing loss propagation for discriminator and generator.

Symbolic linking of Knowledge graphs to generate text using LSTMs

October 2018

Created knowledge graphs across semi-intersecting topics through custom data extraction pipelines, streamlining preprocessing and structured data generation. Developed an LSTM-based network customized for generating text closely aligned with input context, utilizing symbolic links between diverse topics. Established an adaptive learning pipeline, incorporating user feedback for iterative batch training.

## **Technical Skills**

Languages: Go, C++, Python | Frameworks: Tensorflow, PyTorch, NLTK | Orchestration: Docker, Kubernetes, OCI and experienced in working with AWS, AZURE and GCP solutions.