# **Arvind Sharma**

+91-9176076208 | karvind1998@gmail.com | linkedin.com/in/arvindsharma18

## **EDUCATION**

#### SASTRA Deemed to be University

Bachelor of Technology in Computer Science Engineering

Thanjavur, Tamil Nadu

June 2020

- Cumulative GPA: 8.5411
- Awards & Honors: Dean's Merit List (Top 10% in CS Department) for Academic Year 2016-17,2017-18,2018-19,2019-20;

## TECHNICAL SKILLS (\*Technical Knowledge, little Hands-on experience)

Languages: Python, Java, YAML, C++

Frameworks/Packages: NumPy, Pandas, scikit-learn, transformers, OpenAI, langchain, llama.cpp, diffusers, Tensorflow, Pytorch, spaCY, Docker, Kubernetes, Istio, FastAPI, Springboot, Postgresql, Git, Helm Charts, Ansible, Redis\*, Terraform\*, Apache Kafka\*

Cloud Platform: AWS (EKS, EC2, Cloud Formation, ECR, IAM, S3), GCP (GKE, Buckets, VM, Cloud Vision API), Azure (VM, Disk, OpenAI)

Developer Tools: MS-Excel, MS-Word, VSCode, Anaconda, GitLab/Github, Swagger editor, Postman

#### WORK EXPERIENCE (3+ years)

## **Tata Consultancy Services**

Machine Learning Engineer/Developer

Chennai, Tamil Nadu

October 2020 - Present

- CTO Taskforce(August 2022 Present)
  - Product Lead and Lead Developer, handling Requirement Analysis, Designing solution and Delivering MVPs.
  - Consulting, Ideating and Building Generative AI Solutions, Use cases and POCs using Large Language Models and Vector DBs.
  - Use cases include designing and leading a team to create a workflow using OpenAI and Fine-tuned Stable Diffusion XL model with refiner, Domain pipeline Automation using GPT3.5, Finetuning Open source models on custom datasets.
  - POCs include Talking Avatars, Sales Bot and Policy Enforcement using Agents, Prompt Engineering with Open Source model.
  - Worked with Quantized Open source models using llama-cpp-python and explored Generative AI open sourced projects.
  - Market Research and Data Analysis on business related data to enable Strategic Business choices on Emerging Technology.
  - Studying and Presenting new Generative AI research and Solutions to multiple stakeholders.
- Corporate Labs (STIL & CMI Rapid Labs), TCS (July 2021 July 2022)
  - Developed and Documented Sales based use cases using NLP techniques as part of Sales and Technology Innovation Lab (STIL)
  - In Rapid Labs, developed rapid state of the art Artificial Intelligence solutions (NLP, Image Processing/Computer Vision, Graph NN) as part of POCs and use cases for various Clients across Communication Media and Information Unit of TCS.
  - POCs include Speaker Diarization, Automated Image Annotation using Vision API, Q&A tasks using Transformers.
  - Gained competency in 5G core technology and worked on orchestration of application containers using Kubernetes(EKS).
  - Use cases include Edge Video Analytics Application, Application platform for Ecosystem based solution. I took responsibility for Development, Automation of Infrastructure using Cloud Formation and Ansible, Container Orchestration using Kubernetes(EKS) and Network Mesh using Istio for the mentioned use cases.
  - Studying and presenting multiple emerging technology across domains and open source libraries to multiple stakeholders.
- Telefonica, UK (December 2020 June 2021)
  - Took responsibility for monitoring of Big Data modules, which provides key insights about the customers.
  - Part of production upgrade Team, took responsibility for Analytics Application's compatibility with upgraded Environment.
     Achieved Zero Data loss.

### Universitat Autònoma de Barcelona

Barcelona, Spain

Research Intern (Exchange Student), Centre de Visió per Computador

February 2020 - July2020

- Acquisition of Hyper Spectral Images and Pre-Processing
  - Processing and collection of Multiple Bands belonging to different spectral intensities to form an Image Band Cube.
- Semantic Segmentation Network for Classification
  - Trained U-Net model with Band Cube of an Image and its corresponding Annotated Images as Inputs.

BroadSoft Chennai, Tamil Nadu
Intern November 2017 – December 2017

Got hands on experience with Software Development Life Cycle. Worked under Development team.

## **ADDITIONAL**

- Cricket player having represented school teams and club teams in State level tournament. Football player having represented school for Inter-School tournament. Follow Badminton, Tennis and Mixed Martial Arts, Motor Sports closely.
- Hobbies include Sketching, Movies and Anime, Photography, Music and Books.