



TUSHAR

Software Engineer

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SUMMARY

A **Software Engineer driven by logic**, with more than **2 years of industry experience in developing high performance, scalable, and secure software stack, enabling organisation in driving better product roadmap**. Having in-depth knowledge of Data Structures, Distributed Processing, Algorithms & Machine/Deep Learning.

EXPERIENCE | 2 YEARS & 6 MONTHS

Software Engineer

Intel Corporation

[May, 2019 - Present]

- Currently working on Server Graphics Products - GPUs, to develop the complete pipelines for different components of the H/W which includes analysing their overall performance and debug. Main focus is on compute intensive AI/ML models and their optimisation.
- Developed End-to-End Framework for running the Deep Learning Application Solutions which provide features for performance profiling, scaled/automated execution and many more.
- Recently received **Spontaneous Recognition Award** from Upper Management for bringing out the on-time execution and report attribution.
- As a Software Engineer Trainee for **1+ year**, Explored the deep learning state of the art models in different frameworks like Tensorflow, Caffe and Onnx. I mainly focus on developing the framework to validate these models using automation with scripting languages like bash, python.
- Received **Department Level Recognition** for Software Validation and execution excellence on Intel Neural Network Inference Accelerator. Specially recognised for **On-Time Delivery and Customer Obsession**.

Key Projects

Publication/Research Project -> [Link](#)

- Skills: R, Rattle, Supervised Learning Classification, Random Forest, Decision Tree, Linear Regression Models**
- Presented Published research paper titled 'Prediction Analysis of risky credit using data mining classification models' (IEEE Catalog Number: CFP1752J-ART/ISBN: 978-1-5090-3038-5) released in the 8th International Conference on Computing, Communications and Networking Technologies at IIT-Delhi, India.

Major Thesis - Research Project

- Skills : Python, Pytorch, GPU Programming, Pytorch, Generative Adversarial Network, Deep Learning**
- Performance Analysis and Device Agnostic Optimisation of Image Synthesis Generative Adversarial Network (GAN) Workload on Intel NNPI vs Nvidia GPU

Implementation of KMP Algorithm using MPI+OpenMP (Distributed Systems - HPC)

- Skills: MPI, OpenMP, C++, Scaling, Linux**
- Pattern matching using clusters of 5 systems(Linux Ubuntu OS) for large input in millions to divide the task between each and achieve parallelisation while computing.

Transfer Learning using imagenet dataset and VGG19)

- Skills: Deep Learning, Keras, Tensorflow, Python, Scikit, Image Classification, CNN, VGG19**
- Used Pre Trained Dataset to Classify the Object in the images - Tensorflow, Keras Models, Scikit learn Library were used. Used Imagenet - Fish Dataset along with CNN Model - VGG19 to detect the Category of Fish with K-Fold Validation done after Training the Dataset.

Technical Engineer

Wipro Limited

[Dec, 2017 - Jan, 2018]

- Leveraging the Customer Relationship Management salesforce Utility to provide the real time solutions to client queries and handled the peers issues dynamically at a large scale. Recognized as best performer of the month too.

TECHNICAL SKILLS

Programming Languages

- C/C++
- Python
- R/Rattle (analysis)

Web World

- HTML5
- CSS3, Bootstrap,
- Django
- Javascript

AI World

- Deep Learning CNN,GAN
- Pytorch, Tensorflow
- FFmpeg, DLstreamer
- Supervised/Unsupervised Learning

Database

- SQL
- POSTgreSQL
- NoSQL

Tools & CI/CD

- Docker
- Kubernetes
- AWS, GCP
- Jenkins, Jira
- Gerrit, Gitlab, Github

ACHIEVEMENTS

- College Winner in ICICI Virtual Stock mind season 5
- Organiser, Sangdak Vimarsh, College Tech Fest, 2017

STRENGTHS

- Problem Solving
- Deadline Oriented
- Team Player

EDUCATION

M.Tech Information Technology

NIT Surathkal, Mangalore

2018 - 2020 8.44 CGPA

B.Tech Computer Science

University of Delhi

2013 - 2017 8.40 CGPA

Higher Secondary (CBSE)

March, 2013 8.00 CGPA

Senior Secondary (CBSE)

March, 2011 8.80 CGPA