Rahul Kanojia

rlrahulkanojia@gmail.com | 91-8168869769

EDUCATION

USICT, GGSIPU
Computer Science
Aug 2016 to Jun 2020 | India, Delhi
CGPA:7.85

LINKS

Github:// **rlrahulkanojia**
LinkedIn:// **rlrahulkanojia**

INITIATIVES

- UMANG 2.0 (Educating underprivileged Kids)
- Gender Equality Awareness Drive.
- IEEE Plantation Initiative.

ACHIEVEMENTS

- Smart India Hackathon 2018
- IEEE USICT Tech Lead 2017-18
- IEEE USICT Vice Chairperson 2018-19
- VLSID Conference 2019
- Harvard US India Initiative 2020
- USICT Training and Placement Coordinator (2019-2020)

SKILLS

- Machine Learning
- Deep Learning | Computer Vision
- Pytorch, Tensorflow, MXNet
- Python, C++, Julia, Golang
- AWS : EC2, ELB, EBS, RDS, X-Ray, CI/CD
- Github, Gitlab
- Docker, WanDB, Hugging Face

COURSEWORK AND CERTFICATIONS

- **Deep learning nanodegree**
- **AWS**: Developer Associate.
- **CS 329S**: Machine Learning Systems Design course
- **CS231n**: Deep Learning for Computer Vision
- **Improving Deep Neural Networks**: Hyperparameter Tuning, Regularization and Optimization

EXPERIENCE

ANGARAK | AI Engineer 2

September 2020 - Present | San Diego, California

- Created and Supervised Production environment to manage a fleet of 500+ devices using AWS.
- Achieved SOTA performance with custom Object Detection on Edge Devices.
- Researched and Developed CUDA Accelerated GStreamer Pipeline to improve performance by 80%.
- Model Optimization using Quantization and Pruning to achieve 40% improvement in latency.

CREDMARK | Blockchain Analyst | Part-Time

July 2021 – June 2022 | Austin, Texas

- Created Machine learning pipeline to give a credit score to a given user.
- Created Risk Metrics (VAR, LCR, cVAR) for Uniswap V3, Uniswap V2, AAVE, and Compound.
- Worked with smart contracts and WEB3 to access blockchain for on-chain data analysis.
- Created APR Engine for evaluating and maximizing return for Uniswap V3.
- Won 2nd Place in the alpha MEV blockchain competition.

UNREAL AI | Deep Learning Engineer

October 2019 – September 2021 | New Delhi, India

- Responsible for Research and Development of Machine Learning Solutions on Edge Devices.
- Created Pose Estimation Pipeline from scratch in Tensorflow and optimized it for Android-based devices with 30 fps.
- Analyzed un-hydrated patches in farmlands using CV techniques to ensure proper vegetation.
- Led project in collaboration with IIT Delhi and Ericsson using 5G services.
- Created Lightweight Architecture from scratch for tasks like Object Detection, Face Recognition, and Pose Estimation.

PATENTS

SMART BACKYARD SYSTEM

PROJECTS

PRODUCT RECOGNITION

- Solved the problem of lack of labeled data in shelf product recognition using contrastive learning.
- Curated a dataset of 1.2 million images.
- Extracted product embeddings to cluster images and built an image-based fast search using FAISS.

SPEECH DRIVEN FACIAL ANIMATION

- Used pre-trained VGG16 for feature extraction, Resnet blocks for Generator and 9 convolution layers for discriminators.
- Implemented temporal GAN with 2 discriminators on GRID and TCD TIMIT.
- Used Adam Optimizer from RMSProp, Adagrad and SGD for best results.