

Shubham Singh

Accumulated a unique mix of 6 years of experience in Software Engineering, spanning Computer Vision, data engineering, Web Dev and Competitive programming.

Contact

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Work Experience

Software Engineer, DoctorPlan

July 2019 - June 2024 (5yrs)

DoctorPlan is a Silicon Valley-based healthcare startup revolutionizing patient care through data-driven personalization.

- Played a pivotal role in development and maintenance of our three major platforms: Hospital app, Patient web app and internal admin dashboard, serving over 100k patients.
- Led a performance optimization initiative by refactoring and redesigning schema leading to 11x decrease in platform load time.
- Engineered robust data processing pipelines for sensitive patient medical data, ensuring HIPAA compliance and data integrity.

Full Stack Developer, ALLPS Digital GmbH

July 2018 - June 2019 (1yr)

- Architected and developed robust dashboards and a secure payment gateway for Generali our major Swiss partner bank.
- Optimized in-house OCR algorithm, improving character recognition accuracy by 30-35% through refined ML models (AlexNet) and optimized data inputs enhancing invoice processing accuracy by 20%.

Cartesian (3 Months in 2018 • Internship)

Developed a scalable live streaming service utilizing AWS, FFmpeg, and Python, capable of handling concurrent streams

[Portfolio Website](#)

[Github](#) [LinkedIn](#)

Skills

Technical Skills

- PyTorch
- Tensorflow, Keras
- Python, Numpy, Pandas
- SQL
- LLMs, RAG
- Javascript (ReactJS, VueJS)
- C++

Tools/Software

- vLLM
- Tensorboard
- ML Flow
- AWS Sagemaker/Google Cloud
- Hugging Face
- CUDA, TensorRT

Projects

Training Layer Visualization (PyTorch) [Github](#)

A tool to visualize the hidden layers of the model in real-time using only Matplotlib and PyTorch, offering insights into the feature extraction process and model behavior.

NFS Self Driving Car (Tensorflow 2, OpenCV) [Github](#)

Training a Convolutional Net to play NFS Most Wanted only by giving video input. Collected, labeled and preprocessed data from scratch. Found InceptionResNetV2 model gave the best accuracy.

Medical MRI image segmentation UNet (Tensorflow 2) [Github](#)

This project involved training a deep learning model to accurately segment anatomical structures and abnormalities in MRI scans, improving visualization and aiding doctors in diagnosing and planning treatment.

Mario Reinforcement Learning (Tensorflow 2, OpenAI Gym) [Github](#)

Training a Mario reinforcement learning agent on Level 1-1 using Open AI Gym and Stable Baselines 3 PPO algorithm.

Detecting Covid-19 using X-Ray Images (Tensorflow v1) [Github](#)

Created a deep learning tool to spot COVID-19 in X-ray images, helping doctors quickly and accurately identify infections, which speeds up treatment and improves patient care.

Instacode Online Judge (Javascript, php) [Github](#)

An online coding platform similar to HackerRank I made for holding College CSE department Practicals that evaluates code in 14 different programming languages and ranks/scores students making grading process much efficient.

Interests

Local GPUs & Home Servers | Psychology | Reading | Camping