HARIHARAN M

Senior Software Developer

📞 +91 9980773594
@ hari.haran849@gmail.com
www.linkedin.com/in/hariharan-manoharan-6b059958
📍 Bangalore, IN
https://www.kaggle.com/hariharan849
https://github.com/hariharan849

JOURNEY SO FAR

Senior Software Developer with 9 years of experience in VFX and Oil & Gas, specializing in 2D pipeline development, AI integration, and workflow automation. Skilled in AI-driven automation, model-based asset management, and enhancing artist efficiency. Experience in machine learning for image processing, deep learning-based upscaling, and AI-assisted content generation. Proficient in TensorFlow, PyTorch, OpenCV, NLP, HuggingFace, MLOps, AWS sagemaker and LangChain for AI-driven production tools.

AI & MACHINE LEARNING

- **Image Processing & Computer Vision:** Machine learning-based image enhancement, deep learning-based upscaling, and OpenCV automation.
- **Deep Learning Frameworks:** TensorFlow + Keras and PyTorch + PyTorch Lightning for image processing, NLP, and GANs.
- **Data Science:** Scikit-learn, XGBoost, CatBoost, MlFlow, PyCaret, LIME, Shap, Feature Engine, mlxtend, AWS sagemaker for predictive modeling, classification, and feature engineering.
- **Retrieval-Augmented Generation (RAG):** LangChain for AI-driven production tools and knowledge retrieval.
- **AI for VFX & Automation:** Implementing AI-powered solutions for compositing, object detection, tracking, and automation (i.e. SAM enabled track anything).
- **Kaggle Competitions:** Active participation in ML & CV challenges, applying SOTA models to real-world datasets.

EXPERIENCE

Senior Software Developer
📅 02/2018 - Present

Moving Pictures Company
📍 Bangalore, India

VFX Company

- Led Nuke & Python Migration: Spearheaded the migration from Nuke12 to Nuke14 and Python2 to Python3, enabling shows to run across Nuke12, 13, and 14 in a mixed Py2/Py3 environment, ensuring seamless compatibility and minimal downtime.
- Developed a Template-Based Solution: Optimized farm resource utilization by creating a dynamic template system that enabled on-the-fly multi-shot workflows, allowing supervisors to efficiently manage and review multiple shots simultaneously.
- Enhanced Review Workflow: Contributed to the NukeStudio-based review system, streamlining entire sequence reviews and improving collaboration by transitioning from a Shotgun-based workflow to a more integrated NukeStudio environment
- Developed Roto Prep Pipeline: Built a complete roto prep pipeline using Silhouette Boris FX, streamlining the entire process from gather to render through Tractor.
- Improved Pipeline Efficiency: Boosted pipeline adaptability and performance across multiple show environments, ensuring smoother workflows, reduced resource consumption, and faster turnaround times.

Junior Software Developer
📅 06/2015 - 02/2018

Infosys
📍 Mysore, India

Digital services and consulting

- Developed Reservoir Simulation Application: Contributed to an integrated reservoir simulation application for an International Oil and Gas Major, modeling oil and gas production from wells and reservoirs using geological and simulation data.

EDUCATION

Bachelor of Technology
📅 06/2011 - 05/2015

Kongu Engineering College (Anna University)
📍 Erode, India

WHY AM I THE BEST FIT?

Continuous Learning & AI-Driven Innovation

I am an active learner who continuously expands my expertise beyond VFX, mastering data science, machine learning, deep learning, and LLMs.

While specializing in VFX software development, I have consistently enhanced my skillset in AI-driven workflows, automation, and intelligent tools

Consistently proven my ability on social platforms including GitHub, Kaggle and LinkedIn

Extensive experience in 2D VFX

Led complex Nuke and Python3 migrations, optimized pipelines, and enhanced multi-show workflows, driving efficiency and future-proofing VFX environments

Certificates
Achieved TensorFlow Developer Agentic AI (In Progress)

AI Enthusiast:
Certified TensorFlow developer, proficient in **PyTorch**, **Keras**, **scikit-learn**, **XGBoost**, API
Actively practicing Kaggle competitions with foundational knowledge in NLP, Langchain, and RAG.

Quality Assurance:
Delivering high-quality results through rigorous **Quality Assurance** practices, including comprehensive **unit test cases**, adherence to **SonarQube** analysis, and compliance with **PEP8** standards, ensuring code reliability, maintainability, and seamless integration within complex VFX pipelines.

SKILLS

DCC	Nuke
NukeStudio	Silhouette
FrameWorks	PySide
Scikiit-Learn	PyTorch
Keras	LangChain
Streamlit	Gradio
MLFlow	docker
NLP	HuggingFace

FastAPI SageMaker

Languages Python C++