

Artificial Intelligence (AI) Deployment Solutions

After the industrial revolution, information revolution changed the planet earth. But lot of data generated during information revolution and several magnitude higher data than the past to be generated in future due to advent of IoT devices and 5G, necessitated that the data should be interpreted by machines and not by human beings as it is simply beyond the human capacity to interpret and consume this kind of enormous data.

Artificial Intelligence is solution to these kind of problema. We understand this and strive to provide following AI deployment solutions to address some of the problems.

Our solutions are compatible with ONNX, models trained by different AI research and training platforms compatible with ONNX can be directly used with our solutions. To find more details on ONNX, please visit: <https://onnx.ai/>

Our team can also support clients in training models with different AI research and training platforms compatible with ONNX. For the moment we support Caffe only.

1. AI Deployment Software Library for iOS and Android

Compatibility: ONNX, Apple ARKit, Google ARCore

Application: Augmented Reality

Extend capabilities of ARKit and ARCore with our solution. Real Life Object Detection is supported by our solution apart from marker and location based AR solutions provided by ARKit and ARCore. This solution is highly optimized for ARM processor.

2. AI Deployment Software Library for Edge

Compatibility: ONNX, BeagleBone, RaspBerry Pi, Embedded FreeBSD and Linux

Application: Edge Devices for IoT

Preprocess IoT data at edge devices to reduce latency and computational loads at mobile phones and cloud. This solution is highly optimized for ARM processor based edge devices and can be ported to other ARM based edge devices than BeagleBone and RaspBerry Pi according to customer's requirements.

3. AI Deployment Software Library for Cloud

Compatibility: ONNX, J2EE, MQTT, Docker

Application: Enterprise AR & IoT

Our AI solution supports enterprise wide application of AI in IoT and AR. Java (J2EE) applications around our solution can be build and deployed at cloud according to customers requirements.

4. AI Deployment IP Cores for FPGA

Compatibility: ONNX, Xilinx, Altera, ASIC

Application: Industrial Computer Vision, Edge Devices

In order to detect objects in Industrial Processes and at Conveyor Belts, data generated by cameras, different kinds of photodiodes and other sensors can be processed by our IP Cores in real time according to optimized and customized IP Cores as per customers requirements. The IP Cores so optimized and customized can be deployed on Xilinx and Altera FPGA platforms. Our sister concern Aimfin Consultants Pvt Ltd can further optimize these IP Cores for FPGA & ASIC and get these IP Cores converted into customized ASIC Semiconductor Chips if customer requires further increase in speed and decrease in per deployment cost provided the chips are purchased in volumes.

We provide time-limited non-commercial license for use of our Anasim Processor AI IP Cores (With runtime limited to 1 hour from device power-on) free of cost for academic or non-commercial users who work on our Priyatoonz repositories based open source projects. Please visit our github account (<https://github.com/DSP-Channel>) for more details on Priyatoonz Open Source Projects. Contact at charu@priyatoonz.com for commercial and the non-commercial licenses and AI IP Cores downloads and visit www.priyatoonz.com for more details. You may contact at cto@anasim.in for new Anasim Processor AI IP Cores and Software Library related development work.

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Design & Development: Charu Kanzehr