

Santana Row, 3031 Tisch Way, 110 Plaza West, PMB#: 220, San Jose, CA 95128

**Machine Learning Engineer** As a Software & ML engineer, you will develop advanced ML model architectures to tackle challenges in image processing, vibration, and audio analysis, focusing on image recognition, scene classification, anomaly detection, and sound event recognition.

Responsibilities include training, fine-tuning, and compressing models for production, as well as building data pipelines, datasets, and evaluation frameworks. This hands-on role is ideal for a skilled engineer eager to push the boundaries of Al-driven solutions.

## **Required Qualifications:**

- MS or PhD in Computer Science or EE.
- In-depth knowledge of CMOS image sensor processing, sound/audio DSP, audio codec standards, and pre/post-processing algorithms.
- Deep expertise in optimizing and deploying ML models on resource-constrained platforms
- Track record of innovation in AI/ML algorithms, frameworks and applications
- Expert-level knowledge of deep learning frameworks like PyTorch and TensorFlow
- Experience with Al accelerator hardware and software co-design is a plus.

## **Preferred Experience:**

- Proven experience implementing and optimizing ML workloads on specialized hardware, including Custom ASICs, FPGAs, DSPs, and deep learning accelerators.
- Hands-on experience training, fine-tuning, optimizing, and deploying ML models.
- Experience with test automation infrastructure.
- Demonstrated ability to work with and optimize popular machine learning libraries (e.g., PyTorch, JAX, vLLM, ONNX)
- Expertise in optimizing and compressing ML models for resource-constrained platforms

## Responsible for:

- Develop ML model architectures and training pipelines with a hands-on approach.
- Define and implement the software development process, including specifications, code development, SQA, and CI/CD.
- Analyze neural network models to identify optimizations at the model, framework, compilation, and execution levels.
- Implement ML and DSP algorithms on specialized hardware.
- Porting of models to embedded hardware platforms (ASIC, FPGA, boards).
- Stay updated on ML trends and integrate relevant advancements into company strategy.