

Software Developer – nnMAX Inference Compiler

Flex Logix is finishing design of its first Inference Co-Processor, InferX X1, which is based on our nnMAX Inference IP. We will have first silicon March 2020. And we have begun architecting the follow-on chip. InferX has industry-best inference efficiency: more inference throughput per \$ and per watt. We excel on larger models and megapixel images, but can run any neural network.

RESPONSIBILITIES

Part of the small but excellent team responsible for our nnMAX Compiler: a TensorFlow-to-binary flow:

- Parsing of Tensorflow Lite & ONNX & other model description languages to our internal model format
- Automatic mapping from TensorFlow Lite/ONNX to EFLX eFPGA (run Verilog) controlling nnMAX engines for highly efficient neural-network (NN) inference: configuring the dataflow path layer-by-layer and generating the “soft logic” state machines for each layer to control them

This is a software developer role but you need to understand computer architecture and digital logic.

Read more about nMAX and InferX on our Inference page at www.flex-logix.com

EXPERIENCE AND SKILL REQUIRED

BSEE/MSEE with courses in computer architecture/digital logic & 3 years of relevant industry experience

Must be very smart and very motivated

Must have experiences with

- Object-oriented Programming skills in C++ in Linux environment
- SW Programming and debugging environments
- Verilog design and verification for high-performance digital logic

You don't require AI/NN expertise – if you are smart and motivated, we can teach you

Preferred experience OR willing to quickly learn:

- TensorFlow or other DL framework – either as a developer or user
- FPGA synthesis and designing for high-performance FPGAs

Must be passionate about being part of an aggressive, venture-backed startup team that is changing the way chips are architected, designed, and programmed

Must be entrepreneurial, innovative problem solver and willing to work hard.

MUST live in Silicon Valley and have US citizenship or permanent residency (“green card”), or holding a current H1-B visa