Machine Learning Expert and System Architect

Huawei builds processor SOC for mobile and ICT application. As the demand for machine learning increases, we see increasing needs to build specific hardware to address such demand. We are building up a new team to develop a new favor of processor specified in machine learning computation based on algorithms like CNN or DNN.

In particular, we are looking for machine learning experts and system architect to lead and help to define and develop such DNN/CNN processor core. Such individuals shall work with the algorithm team and drive the architecture design and implementation of such processor core. These impactful roles require candidates who are self-starters and possesses deep knowledge of the machine learning algorithm and processing; and has extensive knowledge of hardware and processor architecture and integrated circuit implementation.

Job Description
1. Develop new processor cores implementing machine learning DL/ML algorithms, focusing on applications such as, driver-less cars, robotics, compute vision, data mining etc.
2. Take such processor core from architecture to implementation with corresponding verification and validation work.
3. Architecture planning from the API framework/Libs or Firmwares to chip hardware engine with a Top-down system view.
4. Evaluate and compare different DL/ML algorithms for specific applications and related tasks, in particular with regard to the performance, training, and suitability for embedded applications;
5. Close communication with other chip or hardware/software architecture experts.

Qualifications
1. Master in computer science, artificial intelligence, mathematics, physics and statistics.
2. Expertise and practical experience in the following domains: Artificial Intelligence, Deep Learning, Machine Learning. Practical experience in CNN/RNN algorithm is a plus.
3. In-depth practice in deep learning implementation on GPU/FPGA/ASIC, such as Caffe, ConvNet, Torch…etc., mastering the tuning strategy for CNN/RNN’s parameters.
4. Good Knowledge in chip and RTL development using Verilog or other HDL.
5. Technical proficiency in programming languages: C/C++, Python, or Matlab, Java, familiarity with Linux environment.
6. Experience with big data technologies and HPC is a plus.
7. Excellent communicative skills in read and written English, fluent spoken English.
8. Strong communication skills, ability to express oneself logically, strong sense.

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