

Hardware Field Applications Engineer Job Description:

OVERVIEW

The use of machine learning to reimagine software applications and service development is exploding. Companies from every corner of the industry -- the biggest cloud service providers to corporate industrials to financial services to healthcare to retailers -- are exploring new ways of building products and services using data-centric learning models in place of traditional explicit programming. The drive to deliver more timely and more accurate results is compelling an ever greater need for specialized computing power. GPUs have been hailed as the solution to those computing needs but the industry is actively searching for a better, more efficient solution. Graphcore has that solution.

Graphcore's Intelligence Processing Units, or IPUs, are specifically designed for artificial intelligence and compute-dense graph applications. These are not GPUs, Graphics Processing Units, but rather graph processors especially adept at the kinds of computations used in understanding relationships within a sea of data. Architecturally, IPUs look nothing like GPUs. They offer performance, latency, and power efficiency advantages a GPU will be unable to match. Graphcore offers support for popular industry ML frameworks and a full tool suite for developers to innovate both within and outside those frameworks.

Graphcore is looking for an exceptional Field Application Engineer with expert knowledge of PCI and PCI Express, including PCIe protocols from the physical layer upwards and general experience with the PCIe ecosystem including drivers, devices and application-layer protocols such as NVMe. You will be working closely with Graphcore's customers and partners to help integrate our Intelligence Processing Unit (IPU) technology with their hardware and software infrastructures.

RESPONSIBILITIES

- Assist customers with integration of Graphcore's product into their hardware infrastructures, acting as the key field resource for solving PCIe and lower-level hardware issues
- Work with and represent Graphcore at industry bodies, and work to ensure compliance of Graphcore products with relevant industry standards
- Be a technical expert on Graphcore's products, directly supporting our Sales teams to secure design wins, and to lead hardware and software support of our products from the design-in phase through to successful completion and production deployment
- Shepherd critical customer issues and provide timely advance warning of critical issues that need attention

- Work with the Product Management and Engineering to ensure a good flow of customer and market feedback that can be incorporated into future products

REQUIREMENTS

- 4+ years of related experience in a high tech electronics industry in a field engineering or design role
- Bachelors in Electrical Engineering or equivalent experience
- Expert knowledge of PCI protocols from physical layer upwards
- Good knowledge of PCI ecosystem including drivers, NVME, etc
- Excellent communication & presentations skills and comfortable in a customer-facing environment
- Ability to multitask effectively in a fast paced environment
- Action-oriented with strong analytical and problem solving skills
- Strong time-management and organization skills for coordinating and prioritizing multiple projects and initiatives
- Keen interest to learn about the exciting new field of AI

DIFFERENTIATORS

- Masters or PhD in related computationally intensive science or engineering field
- Experience with other high speed serial protocols such as ethernet, SAS, SATA or USB
- Prior experience using PCI (and other protocols) test equipment including protocol analysers and high speed scopes
- Good understanding of high speed signal integrity issues
- Ability to develop and debug firmware for microcontrollers
- Knowledge of:
 - High speed (>16Gbps) serial interfaces
 - Multi-phase, high current (>100A) power supplies
 - Thermal and power dissipation management
- Experience working with customers in the Cloud, Automotive or HPC domains

This position will be based at our office in our Palo Alto office and could require frequent travel to customer & partner sites.

Graphcore is an equal opportunity workplace and we would like to hear from all qualified applicants. If you have a disability or any special needs that we might need to accommodate, please just let us know.