Accelerated Machine Learning for Spark ML

10x faster execution of Spark ML applications

About Spark

Apache Spark is a widely-used open-source distributed general-purpose cluster-computing framework. Spark ML is a distributed machine-learning framework on top of Spark Core that, due in large part to the distributed memory-based Spark architecture, is as much as nine times as fast as other frameworks, and scales better than other frameworks. Many common machine learning and statistical algorithms have been implemented and are shipped with Spark ML which simplifies large scale machine learning pipelines.

THE CHALLENGE

Machine Learning applications are computational intensive applications and require powerful processors to handle vast amounts of data. Typical general-purpose processors are very slow to process on-time large amount of data for machine learning applications.

THE SOLUTION

InAccels develops high performance accelerators for AWS f1 instances that are specialized on machine learning applications. The hardware accelerators can be used to speedup the machine learning applications and reduce the TCO. The main advantage is that it is fully compatible to Apache Spark ML framework and there is no need for code changes. It support C/C++, Java, Scala and Python.

THE BENEFITS

Up to 10x speedup
Using's InAccel's Accelerated ML suite on aws f1 instances you can achieve up to 10x speedup for Machine Learning

2x lower TCO
Due to the faster execution time on the cloud, using InAccels' technology you can achieve up to 2x lower TCP on aws.

Zero-code changes
InAccel provide all the required APIs and libraries. Thus there is no need to change your application code at all.

ABOUT INACCELAND AMAZON WEB SERVICES

InAccel is a standard AWS technology partner and the FPGA accelerators are fully compatibel with aws f1 instances.

AWS provides strong machine learning capabilities on the cloud and a rich APN Partner community to help you unlock new business value and serve customers.

NEXT STEPS

To learn more about how AWS and how inaccel can help your business, visit www.inaccel.com