Intro to parallel programming with CUDA and python - Mahir Patel

About the speaker

I am an engineering student who like to learn about all the intricacies behind everything I learn. I believe that in order to learn something you should always follow a practical approach. Everything I have learned is through creating various projects.

Currently, I am learning about programming a GPGPU for high speed code.

Abstract

Untill few years ago GPGPU programming was a very difficult task.After the creation of the wrapper library for python, so many doors opened for developers from different field.I would like to introduce parallel programming on CUDA through either PyCUDA or Numbapro (used by Anaconda Accelerate). These two libraries provide a lot more abstraction than opencl but still less than OpenACC. Untill a library for openACC is created these are the best options.

For examples, just off the top of my head , encryption with DES with CTR/ECB mode on a large data or just simply performing arithmetic operations on millions of floating point numbers.