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INDEX

1. Introduction



The slides and all source code are hosted at GitHub:

• github.com/phrb/---

SAMPLE CODE

```
#include <cuda runtime.h>
float *h A = (float *) malloc(size);
if (h_A == NULL) { ... };
float *d A = NULL;
err = cudaMalloc((void **) &d A, size);
err = cudaMemcpy(d_A, h_A, size, cudaMemcpyHostToDevice);
if (err != cudaSuccess) { ... };
int threadsPerBlock = 256;
int blocksPerGrid = (numElements + threadsPerBlock - 1) / threadsPerBlock;
vectorAdd<<<blocksPerGrid, threadsPerBlock>>>(d_A, d_B, d_C, numElements);
err = cudaGetLastError():
err = cudaDeviceSynchronize();
if (err != cudaSuccess) { ... };
err = cudaMemcpy(h_C, d_C, size, cudaMemcpyDeviceToHost);
err = cudaFree(d A):
if (err != cudaSuccess) { ... };
```

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