# GPU Teach Kit: Accelerated Computing

# x265 Motion Vector Estimation Acceleration

## Building

This project depends on a signficant amount of x265 encoder harness code, which can be acquired with the following steps

```
hg clone https://bitbucket.org/mrj10/x265
```

Copy the contents of the `src` directory to `x265/source`

```
cp src/* x265/source/.
```

Then build the code.

```
cd x265/build/linux
./make-Makefiles.bash
```

## Running

Find the location of the test files `New_ProRes.yuv`. Replace the `PATH` and the `LD_LIBRARY_PATH` with the corresponding paths on your system. This may be done without installing.

```
export PATH=/home/you/install/bin:$PATH
export LD_LIBRARY_PATH=/home/you/install/lib:$LD_LIBRARY_PATH
./ece408_competition --input News_ProRes.yuv --input-res 3840x2160 --fps 23.98 /dev/null
```