### FINAL PROJECT

Lesbek Rakhat 190107039 Duisenbai Samat 190107092

#### What problem we are trying to solve?

A series of utilities aimed at making OpenCL easier to use. Includes clCompiler which generates both binary outputs and precompiled headers which can be used in conjunction with clEnvironment. clQuery allows you to print all known information about a OpenCL data type. clPid, clYUV clImgFilter are all examples of how to use the utilities to create a compile time kernel make it a dependency in you makefiles and then use the clEnvironment to call your kernel.

## What results do you hope to get?

We wanted to get an opportunity that allows us to fully specify a generic OpenCL kernel call using a predefined structure, which frees you from having to worry about how to queue/call/pass arguments/etc.

#### Why is your problem important?

■ What does this environment do: This clEnvironment API allows you to pre-compile your OpenCL kernels into binary files, and then import them into C/C++ code as statically defined arrays of data, which can then be reused using the clCreateEnvironmentFromBins API. make system here also forces the conversion of %.cl to %.h to be a dependency on the successful creation of your program/library/shared object.I think that's why our project is so important

# How does your project relate to the chapters we have been studying in class?

■ We want to use materials from chapter 5 and 8,9. We will use the knowledge that we learned in the fifth chapter about OpenCL. As well as Parallel implementation of Seam Carving.

## Which technologies do you use?

In this project we will use the clEnvironment API and clCreateEnvironmentFromBins API technologies

#### THANK YOU FOR ATTENTION