

# Using Integrated Processor Graphics to Accelerate Concurrent Data and Index Structures

Reproducibility Description Appendix

JOEL FUENTES, University of California, Irvine

## GATHERING THE SOURCE CODE AND DATASETS

The CM Skiplist as well as CMIB for index structures are published at:

- CM Skiplist: <https://github.com/jfuentes/CM-Skiplist>
- CMIB: <https://github.com/jfuentes/CMIB>

Datasets are included in the data directory of each project. These correspond to basics datasets, you may try with any other dataset that follows the format specified in the README file.

The CM compiler and runtime can be downloaded from:

- <https://github.com/intel/cm-compiler>

The C for Media development package can be downloaded from:

- <https://01.org/c-for-media-development-package/>

In order to build the CM compiler, CMSL and CMIB, the following programs are needed:

- CMake
- gcc
- git
- make
- Python

## COMPILING THE PROJECT AND RUNNING THE EXPERIMENTS

Both projects, CMSL and CMIB, can be placed in the Examples directory from the MDF package.

The first step is set up some environment variables and paths. This can be done by:

```
\.setupenv x86 gen9
```

Where *gen9* is the generation of your processor graphics.

To build the each project, CMSL and CMIB, in the *Examples* directory use:

```
\.build CMSL hw  
\.build CMIB hw
```

Finally, you can the the programs by:

```
\.run CMSL hw  
\.run CMIB hw
```