



Sabancı
Üniversitesi

C EURO²

Offloading Computation to a GPU with OpenMP

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Welcome to the Course



Meet the Instructor:

- Kamer Kaya, Sabanci University

What you will learn

Understanding the basic device execution model and its constructs

- Host-centric design using thread teams.
- Distinction between "teams" and "parallel" execution.

Work distribution among threads and associated constructs

- Utilizing worksharing constructs like distribute and for/do

Mapping data between the host and device, relevant constructs, and data scopes

- Strategies for reducing unnecessary data transfers and managing data scopes effectively for key constructs.

Preknowledge
Prerequisite(s)



- Experience with C++ and OpenMP

What this course is and isn't?

- This course is about offloading computation to a GPU via OpenMP
- It will not teach you OpenMP but basic material will be covered.
- But you will learn what to do when you only know OpenMP (and not CUDA) but still want to use your GPU.

Introduction and Set Up/Configure/Install



- Download the codes from

<https://github.com/SU-HPC/EuroCC2-MOOC>

and try on your computer.

Thanks



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