

Assistant (Student)

# Frequency Optimization of a FPGA Prototype



## **Description**

Our NoC-based many-core design is implemented on multiple Xilinx Virtex7 FPGAs. It is currently frequency limited by individual components.

#### Goal

The goal of this work is to optimize the overall frequency of an FPGA design.

This work includes:

- Indetification of the critical paths of the design
- Pipelining the design to reach higher frequencies

### **Prerequisites**

For this challenging task, several prerequisites should be met:

- Very good knowledge of VHDL
- Very good knowledge of the Xilinx Vivado Synthesis Tool
- Very good experience with FPGA design
- Very good knowledge about digital circuit design

## **Application**

If you are interested, send me an email with your CV, your transcript of records and summary of your experience attachted.

#### **Contact**

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#### **Advisors**