# **Baili LIU**

FPGA Engineer in the Financial Sector at NOVASPARKS Graduated from Polytech Nantes in 2022

## **PROFESSIONAL EXPERIENCE**

## NovaSparks, Paris

### FPGA Engineer | July 2024 - Present

- Development of Feed-handlers for financial market data processing
- Collaboration with the software team and tech lead to define specifications
- Decoding Ethernet market data such as CBOE Canada, Strike, CSE
- Developing new functionalities on multiple FPGA modules
- Developing reference models in C++ for RTL module verification
- Synthesis, P&R, and on-board verification on an automated platform

## Forvia (Faurecia Clarion Electronics), Paris

## ASIC RTL Engineer, Outsourced through Elsys Design | February 2023 - July 2024

- Migrating algorithms from C++ to synthesizable RTL modules in SystemVerilog
- Functional verification and unit test development using Verilator
- Formal verification using JasperGold
- Adjusting constraints according to synthesis results

## CentraleSupélec, Cesson-Sévigné

## Final Year Internship | March 2022 - September 2022

- RTL design and development in VHDL for the NGD circuit
- Using Matlab for the optimization of digital filter
- Implementing the digital NGD prototype on Zyng-7000 SoC

## Rcospi, Le Loroux-Bottereau

## Internship | June 2021 - September 2021

- Programming in C language on Microchip microcontroller and ESP32
- PCB design on Eagle PCB

### **EDUCATION**

### **Polytech Nantes, Nantes**

Engineering Degree | Graduated in 2022 Specialization: Electronics and Digital Technologies

## South China University of Technology, Guangzhou

Bachelor's Degree, Automation | Graduated in 2020

## **University of Technology Sydney, Sydney**

Summer Campus, Data Science topic | July 2017 - August 2017

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## **HDL and Programming Languages**

VHDL \*\*\*\*

SystemVerilog \*\*\*\* C++/C \*\*\*

Verilog \*\*\*

Python \*\*\* C++/C \*\* C+-/C \*\*

## Verification & Simulation

Xcelium, Verdi, Modelsim, JasperGold

### **Tools & Platforms**

Xilinx Vivado, Cadence Genus, Libero

### **Microcontrollers**

Microchip Studio, ESP32

## Protocols & Communication Buses

Ethernet, I2C, SPI, UART, AMBA, AVALON

## **Version Control Tools**

Git, SVN

#### **Others**

Matlab, Makefile, Script shell, Confluence, Jira

## **LANGUAGES**

 English: Complete professional proficiency

• French: Complete professional proficiency

• **Chinese**: Native language

## **INTERESTS**

- Badminton
- Go (Weigi)