

# Baili LIU

FPGA Engineer in the Financial Sector at NOVASPARTS  
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 via 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 Zynq-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

47 rue Marcel Bonnet  
94230 Cachan, France  
+xx xxxxxxxxxxxx  
scutliubaili@gmail.com



## TECHNICAL SKILLS

### HDL and Programming Languages

VHDL	★★★★★
SystemVerilog	★★★★★
C++/C	★★★★☆
Verilog	★★★★☆
Python	★★★☆☆
TCL	★★☆☆☆

### 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 (Weiqi)