

Thomas Sanfourche

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ZhongZheng District, Taipei, Taiwan

FPGA & EMBEDDED SYSTEMS ENGINEERING

French Electronic Engineering student at National Taipei University of Technology, expected to graduate in 2027. Focused on FPGA design, digital systems, embedded systems, low-level hardware/software development, and semiconductor-related engineering. Strong background in C/C++, Python, Verilog/VHDL, and TypeScript, with experience in FPGA workflows, hardware debugging, and system-level design.

KEY COMPETENCIES

FPGA development

CPU architecture

Verilog / VHDL

Memory interfaces

Hardware debugging

Timing analysis

Quartus / ModelSim / Verilator

Altium / Cadence

Technical documentation

PROJECTS & EXPERIENCE

Academic / Personal Project

Oct 2025 - May 2026

FPGA-Based Digital System with CISC CPU

Designed and debugged a complete FPGA-based digital system built around a custom CISC CPU. Worked on CPU instruction execution, memory access behavior, video output flow, and hardware control modules. Used HDL simulation and FPGA synthesis tools to verify design behavior before testing on hardware. Analyzed timing reports, synthesis results, and hardware traces to debug system-level issues.

PlayPal Club

Jan 2026- June 2026

Full-Stack Developer

Developed a mobile application for university tennis communities, focusing on game organization, player profiles, real-time notifications, and social features. Built core features using React Native, Supabase, and TypeScript, including authentication, game creation, participant management, score confirmation, user profiles, and progress tracking. Worked closely with the product and design team to turn the concept into a functional prototype.

Engineering Intern

July 2020 - Jan 2022

Thales (France)

Completed a cybersecurity internship at Thales in France, gaining experience in a professional high-security engineering environment. Worked on cybersecurity-related tasks, technical documentation, and analysis activities while developing a stronger understanding of secure systems, industrial security practices, and professional engineering workflows. Strengthened my ability to work in a structured technical team and communicate clearly in an R&D-oriented environment.

EDUCATION & CERTIFICATIONS

Bachelor's Degree in Electronic Engineering

Expected Graduation: 2027

National Taipei University of Technology

TOEIC — C1 Level

2021

TOCFL — B2 Level

2023

EXTRACURRICULAR ACTIVITIES

NTUT Tennis Team

112-115 NTUT Tennis 校隊

NTUT Tennis Club President

114-115 Club President

Microsoldering & Hardware Repair

Personal interest in electronics repair, small hardware modifications, and hands-on technical work.