

# Benjamin Cathelineau

EMBEDDED SOFTWARE ENGINEER WITH 2 YEARS OF EXPERIENCE

44 Rue Léon Frot, 75011 Paris, France

☎ (+33)651683524 | ✉ bencathelif@gmail.com | 🌐 benjamin-cathelineau-391484172/

## Experience

### SII, working at MBDA

Le Plessis-Robinson, France

EMBEDDED SOFTWARE ENGINEER

February 2024 - Present

- Conception and Development of new features, rework of existing feature from legacy code, resolution of existing bugs, documentation
- Multiple embedded softwares in **C++**, using **IBM Rational Rhapsody**, interracting trough a **Ethernet** network and trough a **1553** bus
- **Python**, **PowerShell**, **bash** and **Makefile** automation of test, compilation and documentation

### TIMA Laboratory

Grenoble, France

EMBEDDED SOFTWARE AND SIMULATION ENGINEER (PHD CONTRACT)

October 2022 - January 2024

- Development of **Simulink/MATLAB** and **SystemC (C++)** (AMS/TLM) SoC (**System-On-Chip**) models
- Comparative evaluation of Cyber-Physical Systems simulation in **Simulink** and **SystemC**
- Restauration and rework of legacy **C++** code, rework of legacy **Makefiles**

### Université Grenoble Alpes, DLST

Grenoble, France

TEACHER

January 2023 - May 2023

- System and Programation Environment course for first year university student : Labs and in Class exercices
- **Bash** scripts, **C** programming basics and simple finite state machine modeling

### TIMA Laboratory

Grenoble, France

MASTER 2 INTERN

February 2022 - June 2022

- Parallel Simulation of Cyber-Physical/Embedded Systems models in **SystemC (C++)**
- Restauration and rework of legacy **SystemC (C++)** code, rework of legacy **Makefiles**

### Kayentis

Meylan, France

ENGINEER ASSISTANT INTERN

May 2021 - September 2021

- Automatic Response System **PowerShell** script
- Web Browser automation with **Python Selenium** for probing a Web Application
- **Jenkins** for automatically monitoring the Web Applicatino

### Givaudan

Vernier, Switzerland

INTERN

April 2019 - July 2019

- Research and deployment of a **Ethernet network** monitoring solution ( Advanced Host Monitor )
- **PowerShell** scripting for automation

### Abissa Informatique Genève

Genève, Switzerland

INTERN

July 2018 - August 2018

- Research and deployment of an IPAM (IP address management) solution (Phplpam)

## Skills

<b>Programming</b>	C, C++, GDB, make, Python, Java
<b>Tools</b>	IBM suite ( <b>Rational Rhapsody</b> , <b>EWM</b> ), VMWare WorkStation, VirtualBox
<b>Systems</b>	Embedded Linux, VxWorks
<b>Modeling and Simulation of Embedded Control Systems</b>	<b>Simulink</b> , <b>SystemC-TLM/AMS</b> , <b>QEMU</b> , Physical Modeling (Differential Equations)
<b>Computer Networks</b>	Cisco CCNA 1 and 2 ( <b>Ethernet</b> , <b>TCP/IP</b> network expert), Wireshark
<b>DevOps and Automation</b>	Docker, Kubernetes, git, Jenkins, Shell Scripts
<b>Languages</b>	French (Mother Tongue), Fluent English (TOEIC 970, TOEFL 104)

## Education

### Grenoble INP - Ensimag and Université Grenoble Alpes

Grenoble, France

MASTER OF SCIENCE IN INFORMATICS AT GRENOBLE - DISTRIBUTED COMPUTING: FROM CLOUD TO EDGE COMPUTING,

October 2021 - June 2022

EMBEDDED SYSTEMS AND NETWORKING

- Obtained a PhD scholarship based on academic achievements

**Grenoble INP - Ensimag**

ENGINEERING DEGREE - INFORMATION SYSTEMS ENGINEERING

*Grenoble, France**September 2020 - June 2022***Université Savoie Mont Blanc, exchange with Montana State University**

BACHELOR - COMPUTER NETWORKS AND TELECOMMUNICATIONS

*Bozeman, Montana, USA**August 2019 - May 2020***IUT Annecy - Université Savoie Mont Blanc**

UNIVERSITY DIPLOMA OF TECHNOLOGY - NETWORKS AND TELECOMMUNICATIONS

*Annecy, France**September 2017 - June 2019*