## Software Developer and Network, Communications, Signal Processing Engineer

## **WORK EXPERIENCE**

## 2016 → 2023 O

## Algorithm Development and Validation at Thales Alenia Space

Review, Coding, Simulation and Testing of various modulation and coding schemes for TT&C Secure Receiver and Emitters: FSK, PSK, Frequency-Hopping Spread Spectrum, Time-Frequency Estimation, Adaptive Throughput, Transmission Security, Synchronisation, Beacon and Ranging.

#### Summer 2014

## Software Developer Intern at LIRYC (view abstract)

Human Machine Interface Development for an intra-MRIS (Magnetic Resonance Imaging System) electrical positioning system at the Electrophysiology and Heart Modeling Institute of Bordeaux.

#### ACADEMIC PROJECTS

# 2015 O N

MSc Thesis at Imperial College London (view thesis)

Underwater images restoration using a physics-based approach to counter the effects of attenuation and scattering in murky water.

## 2014 Second Year Research Project at ENSEEIHT

Image preprocessing (e.g. Wavelet transform) for change detection in multivariate statistical analysis (clusters detection) between infrared, optical and SAR satellites images.

#### **EDUCATION**

## 2014 → 2015 ○

## Imperial College London

MSc in Communications and Signal Processing (Merit)

Main courses include Image and Signal Processing, Communication Theory, Traffic Theory, Network and Web Security, Machine Learning for Computer Vision.

#### $2012 \rightarrow 2015$

#### **ENSEEIHT**

Diplôme d'Ingénieur from a Grande École, Electronics and Signal Processing Main courses include Image and Signal Processing, Analogue and Digital Electronics, Computer Sciences and Microwave Engineering.

#### $2010 \rightarrow 2012$

#### Pierre de Fermat Preparatory Course

Two-year intensive undergraduate course in Mathematics, Physics and Engineering Sciences.

#### IT SKILLS

Engineering Tools: Linux, Matlab, Octave, GCC, GHDL, (...)

Programming languages: C/C++, VHDL, Python, Bash, Javascript, (...)

## **LANGUAGES**

English: fully fluent. TOEIC: 990/990; TOEFL: 104/120

French: native speaker