# SIGNAL PROCESSING ENGINEER

## **WORK EXPERIENCE**

2016 → 2022 ○

Algorithm Development and Validation at Thales Alenia Space

Review, coding, simulation and testing of various modulation and coding schemes for TT&C receiver and emitters: FSK, PSK, Frequency-Hopping Spread Spectrum, Time-Frequency Estimation, Adaptive Throughput, Transmission Security, Synchronisation,

Beacon, Ranging

Summer 2014

#### Software Developer Intern at LIRYC

Development of a software interface for an intra-MRI electrical positioning system at the Electrophysiology and Heart Modeling Institute of Bordeaux

#### ACADEMIC PROJECTS

#### 2015 MSc Thesis at Imperial College London

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 obtained with Merit Main courses include *Image and Signal Processing*, Communication Theory, Traffic Theory, Network and Web Security, *Machine Learning for Computer Vision* 

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Diplôme d'Ingénieur, Electronics and Signal Processing

Main courses include *Image and Signal Processing*, Analogue and Digital Electronics, Computer Sciences and Microwave Engineering

2010 → 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

Space enthusiast!