






# Oscar González Simon

Software Engineer

 My Portfolio  ogonzi  oscar-gonzalez-simon

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## EXPERIENCE

### OCEANOGRAPHIC TELEDETECTION RESEARCH | SATELLITE DATA SCIENCE INTERNSHIP

Institut de Ciències del Mar - CSIC | June 2018 – May 2019 | Barcelona, Spain

- Developed a cloud masking algorithm in Python for Sentinel 2 oversea images.
- Compared the developed algorithm with industry standard cloud-masking algorithms and obtained results comparable to the best cloud-masking algorithms.
- Used a proof of concept wavelet-based method to compute the wavenumber spectrum of sea surface height (SSH) observed by satellite altimetry.
- Developed an algorithm in Python using the wavelet transform to compute the SSH spectrum. Additionally, used a non-orthogonal wavelet with the à trous algorithm to eliminate instrument noise.
- Wrote two scientific papers with the detailed results from the cloud-masking algorithm and the method to compute the wavenumber spectrum for sea surface height.

### MATHEMATICS TEACHER | HIGH-SCHOOL TEACHER

Institut Castellbisbal | October 2021 - January 2022 | Castellbisbal, Spain

- Taught 2 classes of 6th grade maths and 1 class of 8th grade maths.
- Methodically planned and executed on lesson plans, including collecting necessary resources to complete a given lesson.

## CERTIFICATES

### LANGUAGES | ENGLISH

- Certificate in Advanced English (C1) (\*Performance at Grade A demonstrates an ability at level C2)

### PROGRAMMING | JAVA, WEB DEVELOPMENT, SOFTWARE DESIGN AND BLOCKCHAIN

- Blockchain Basics (Coursera)
- Java Programming: Arrays, Lists and Structured Data (Coursera)
- Java Programming: Solving Problems with Software (with Honors) (Coursera)
- Programming Foundations with Javascript, HTML and CSS (with Honors) (Coursera)
- Smart Contracts (Coursera)
- Software Design as an Abstraction (Coursera)
- Software Design as an Element of the Software Development Lifecycle (Coursera)

## SKILLS

### PROGRAMMING

Proficient:

C • Python

Experienced:

JavaScript • CSS • HTML  
C++ • Java • Kotlin

Familiar:

Shell • Solidity

### TOOLS/PLATFORMS

Git • Linux • Docker

## EDUCATION

42

COMPUTER SCIENCE

March 2022 - Present | Barcelona

UAB

BACHELOR'S IN PHYSICS

September 2015 - July 2019 | Cerdanyola

## COURSEWORK

### GRADUATE

Algorithms •  
Data Structures •  
Graphics Programming •  
Virtualization

### UNDERGRADUATE

Numerical Methods I & II •  
Calculus I & II •  
Algebra I & II •  
Quantum Physics I & II •  
Satellite Data Science