

# Mar Roca Cugat

## WORK EXPERIENCE (4)

### Freelancing, Self-employment

DECEMBER 2021 – PRESENT

This work involves me developing websites, graphic design assets (for example, to develop brand identity) and other software development tasks.

### Greylight Projects, Heerlen — *Museum attending*

OCTOBER 2022

My duties involved managing the space during my shifts, taking care of guests at a Greylight Projects exhibition, explaining details about it and answering guests' questions.

### PGamerX Legacy, Virtual — *Automatism software developer and technician*

NOVEMBER 2021 – SEPTEMBER 2023

This work involved me developing software, updating and maintaining a service online. This service is dedicated to serving requests via an API with appropriate responses, using artificial intelligence in some applications, to the users who authored the requests.

### La Caixa d'Eines, Sant Celoni, Catalonia, ES — *Scientific divulgator and instructor*

SEPTEMBER 2022 – JUNE 2023

This employment involves me assisting in post-school scientific and engineering classes to primary and secondary school students by developing my own set of experiments and experiences, as well as preparing the related theoretical lessons.

### Brandon MrAuthor<sup>1</sup>, Virtual — *Scientific proofreading*

JUNE 2020 – AUGUST 2020

This employment involved me proofreading a novel for scientific inaccuracies and inconsistencies. The novel is based in the field of marine biology and general laboratory practices.

## LANGUAGES (4 and a bit)

Catalan: Native

Spanish: Native

English: C2 (Certified by Cambridge English)

French: A2 (Certified by DELF Scolaire)

Esperanto: A1 (not certified)

Dutch: A1, learning further (UM Language Center)

## PUBLISHED PROTOCOLS (2)

### Sampling from a nasal source in order to culture bacteria

Peer-reviewed by Professor Olga Sánchez (UAB, UdG).  
[dx.doi.org/10.17504/protocols.io.81wgb6pk1pk/v10](https://doi.org/10.17504/protocols.io.81wgb6pk1pk/v10)

### IB BIO SL IA M23 - A study on the conditions that affect yeast fermentation

[dx.doi.org/10.17504/protocols.io.261geny6jg47/v2](https://doi.org/10.17504/protocols.io.261geny6jg47/v2)

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<sup>1</sup> Pen name

## Something.host, Virtual — *Technical support and sales*

SEPTEMBER 2020 – JANUARY 2021

This employment had me responding to virtual tickets submitted by clients to help them with technical problems in their servers, or help them get the most adequate product for their needs.

## EDUCATION, TRAINING, AND DIPLOMAS

### Maastricht University — *WBO Biomedical Sciences*

BACHELOR | SEPTEMBER 2023 – (ONGOING) AUGUST 2026

“The bachelor's programme in Biomedical Sciences explores how the human body works in day-to-day life, during periods of illness, while ageing and while performing to the very best of its ability. The relationship between human beings and their environment from molecule, to gene, to cell and organ, to individual and to entire populations is studied. The programme is often described as the ‘research side of medicine’.” (UM website<sup>1</sup>)

### Departament d'Educació de Catalunya + IBO — *Título de Bachiller + IBO Diploma Programme*

COURSE | SEPTEMBER 2021 – JUNE 2023

This double certificate includes both the standard Spanish Bachiller syllabus, and the IBO DP syllabus, allowing me to be graded by both official organizations. The IB diploma requires an Internal Evaluation (research essay) to be performed for each subject, as well as an External Evaluation (written exams).

The subjects evaluated by IB were:

- Analysis and Approaches (Mathematics) HL<sup>2</sup>
- Physics HL
- Biology SL + EE<sup>3</sup>
- Chemistry SL<sup>4</sup>
- Catalan A: Literature HL
- English B SL
- Philosophy SL
- Theory of Knowledge (Epistemology)

The subjects evaluated by the Spanish Bachiller were:

- Catalan language and literature
- Spanish language and literature
- English language
- Catalan and Spanish history
- Scientific mathematics

## SKILLS

### EU Digital Skills Test:

Advanced (6/6 on all tests)

### Computer programming:

Python (intermediate)  
JavaScript (intermediate)  
Webdev (intermediate)  
Linux systems (proficient)

### Presentation skills:

Proficient

## VOLUNTEERING EXPERIENCE (5)

### HackClub – *Club Organization*

SEPTEMBER 2022 – AUGUST 2023

This volunteering project involves me organizing a club for the promotion of computer sciences at school.

### Ins. JVV – *School networks*

SEPTEMBER 2021 – JUNE 2022

This volunteering project put me in charge of taking pictures for sharing in the school's social networks, as well as helping run them.

### Ins. JVV – *Natural History Collection maintainer*

SEPTEMBER 2021 – JUNE 2022

This experience had me create an inventory of all the naturalized animals in the school's collection, brush their fur if needed, clean them up if needed, tag them, photograph them and check their condition.

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<sup>2</sup> HL: High Level

<sup>3</sup> EE: Extended Essay (Research project)

<sup>4</sup> SL: Standard Level

- Biology
- Physics
- Chemistry

## Universitat Autònoma de Barcelona— “*Microbis i jo*”

COURSE | JUNE 2021 – JULY 2021

This week-long course is an in-depth course to the basic laboratory operations in a microbiological laboratory, up to Biosecurity Level 2 handling. Each day consisted of 6 hours in the laboratory, plus 2 of theoretical learning. In total, the course had a duration of 40 hours, 30 of which were in a laboratory.

## Cambridge English — Cambridge Level 3 Certificate in ESOL International (Advanced/CAE)

CERTIFICATE

Grade A with a level of 202: 208 points in reading, 202 points in use of English, 190 points in writing, 210 points in speaking, and 199 points in speaking; out of a maximum of 210 points for this exam. This corresponds to an English level of C2 in the CEFR scale.

## Alliance Française — DELF Scolaire A2

CERTIFICATE

Grade 90/100. This certificate was awarded in February 2022, following the exam in May 2021.

## Departament d'Educació de Catalunya— ESO (secondary school) graduate certificate

COURSE | SEPTEMBER 2017 – JUNE 2021

This certificate indicates that I graduated from high school (following the Spanish system) with an average grade of 8,48 out of 10.

## AWARDS, COMPETITIONS, AND GRANTS

### Hackers@UPC — HackUPC 2022 & HackUPC 2023

HACKATHON | MAY 2022 and MAY 2023

Once a year, the programming student association Hackers@UPC organises the biggest physical hackathon for students in Barcelona. I have participated in both the 2022 and 2023 editions, and I am planning on participating in the 2024 edition as well. In 36 hours, you along with 3 other people must develop and present a project. The best projects will be awarded.

### Ins. JVV – School library maintainer

SEPTEMBER 2021 – JUNE 2022

This experience had me help organize the books in the school library, as well as lending them out to students who wanted to borrow them.

### Escola Annexa – Lèxcit volunteer

SEPTEMBER 2021 – JUNE 2022

Lèxcit is a Catalonia-wide project to employ volunteering high-school students to help primary-school kids learn how to read, as well as improving their reading skills.

### Escola Annexa – English teaching assistant

SEPTEMBER 2021 – JUNE 2022

This experience had me shadow a primary-school English teacher two hours per week in order to help them run the classes, as well as organize games and other educational and recreational activities to do with the students.

## **Col·legi de Biòlegs de Catalunya — *Catalan Biology Olympiads***

OLYMPIADS | FEBRUARY 2023

I placed 3rd place in the local phase, and Q1 of all participants.

## **Societat Catalana de Física — *Catalan Physics Olympiads***

OLYMPIADS | MARCH 2023

I placed in the top 30 of participants in the 2023 physics Olympiads.

## **HackClub — *Winter of Hardware grant***

GRANT | DECEMBER 2022

This grant was given to me for the purpose of purchasing hardware and using specifically for a hackathon that the same non-profit is organizing in mid-February. To obtain it, I had to present a grant proposal.

## **Institut d'Estudis Catalans — *DITMAE probability***

COMPETITION | MARCH 2022

This contest involved answering correctly, and in the least amount of time possible, to a number of probability problems and questions. DITMAE stands for Transborder Saturday for Mathematics in Alt Empordà, and is a yearly competition that has 3 different branches each year, for three different parts of mathematics. I was awarded the prize for first place, meaning my team (a classmate and I) got the most correct answers in the shortest time.

## **Institut d'Estadística de Catalunya — *Planter d'Estadística IDESCAT***

COMPETITION | MAY 2021

This prize is given to the best statistics report that uses publicly available statistical data in order to draw conclusions. These reports must be written by a team of people, and the winners get to compete with the same report in the Spanish Statistical Reports competition. I competed with a classmate of mine.

