



Pau Villén Vidal

Date of birth: 30/05/2003 | **Place of birth:** Spain | **Nationality:** Spanish | **Gender:** Male |

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ABOUT ME

Graduate in Engineering Physics at UPC and Master's student in Bioinformatics for Health Sciences at UPF, with extensive training in the fields of physics, mathematics, computational biology, programming, data science and statistics and related disciplines, gaining many skills while working on several projects, also having had the opportunity of being involved in research groups. With a strong interest in scientific research and development, I am motivated to continue learning and eager to gain practical experience in my field of study. With a positive attitude and a focus on continuous learning, I am determined to work in teams to contribute and enhance my knowledge while collaborating with other professionals to achieve shared objectives.

WORK EXPERIENCE

UNDERGRADUATE RESEARCH FELLOW - COMPUTATIONAL BIOLOGY AND COMPLEX SYSTEMS RESEARCH GROUP (BIOCOM-SC).

UPC - 13/01/2025 - Current - BARCELONA, SPAIN

Development of the following final degree project:

Computational Modelling of CAR T-cell Therapy: A comparative study between continuous and discrete models.

Being part of my university (Universitat Politècnica de Catalunya) research group Computational Biology and Complex Systems Research group (BIOCOM-SC), in collaboration with the Pharmacology Department of Hospital Clínic de Barcelona.

PRIVATE TEACHER - ELPROFEACASA - 10/2025 - Current - BARCELONA, SPAIN

Private English teacher

EDUCATION AND TRAINING

09/2015 - 06/2019 Figueres, Spain

SECONDARY SCHOOL Institut Cendrassos

Website <https://cendrassos.net/> | **Final grade** 9,3

09/2019 - 06/2021 Figueres, Spain

SPANISH BACCALAUREATE, SCIENTIFIC-TECHNOLOGIC TRACK Institut Cendrassos

Chemistry final project awarded with an Honorable Mention from Societat Catalana de Química (Catalan Society of Chemistry)

Website <https://cendrassos.net/> | **Final grade** Honors Diploma (Grade: 9,6 / 10) |

Thesis Evaluation of Enzymatic Hydrolysis with Lactase: The Solution for Lactose-Intolerant Individuals

09/2021 - 08/07/2025 Barcelona, Spain

ENGINEERING PHYSICS DEGREE Universitat Politècnica de Catalunya (UPC)

Relevant projects during the university degree:

- Project on "Rössler attractor" (MATLAB)
- Project on "Casimir Effect"
- Internship at the Radiotherapy Unit of QuirónSalud Hospital in Barcelona
- Project on "Hodgkin-Huxley Model" (MATLAB)
- Project Development of a Light Follower
- Internship at Photonics Sciences Institute (ICFO)
- Development of an IBM model in CAR-T therapies (Python)
- Four computational projects on Astrophysics (MATLAB)
- Project "Classification of facial emotions with Convolutional Neural Network" (Python)
- Project on "Quantum Supremacy"

- Project "Molecular Dynamics Simulation of Different Condensed Phases" (Fortran)
- Project on Quantum Computing (Qiskit)

Website https://www.upc.edu/en?set_language=en | **Thesis** Mathematical Modeling of the Dynamics of Different Cell Types in CAR-T Therapy

09/2025 – CURRENT Barcelona, Spain

MASTER'S IN BIOINFORMATICS FOR HEALTH SCIENCE Universitat Pompeu Fabra (UPF)

Projects on:

- Data Mining
- Machine Learning
- Statistics
- Computational Genomics
- CADD
- Structural Bioinformatics
- Databases
- Web Development

Website <https://www.upf.edu/web/bioinformatics> | **Field of study** Natural sciences, mathematics and statistics

LANGUAGE SKILLS

Mother tongue(s): **CATALAN** | **SPANISH**

Other language(s):

	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken production	Spoken interaction	
ENGLISH	C1	C2	C1	C1	C1

Levels: A1 and A2: Basic user; B1 and B2: Independent user; C1 and C2: Proficient user

SKILLS

Python | Matlab/Simulink | Arduino | C (Programming Language) | Fortran | Latex | Computational Simulations | Mathematical Modeling | Qiskit | Tensorflow, Keras, Pytorch, sklearn | R | Data mining | Machine Learning | Bash | Git | Scientific writing | CADD | MySQL | Front-end development | QSAR | Computational physics and biology

HONOURS AND AWARDS

06/2021

1st Place - Academic Excellence Awards – Ajuntament de Figueres

1st place in Academic Excellence Awards for: Top Three University Admission Scores. Grade: 13.192 / 14

Link <https://cendrassos.net/premis-a-lexcellencia-academica-de-figueres-2021/>

Honorable Mention for: "Evaluation of Enzymatic Hydrolysis with Lactase: The Solution for Lactose-Intolerant Individuals" – Societat Catalana de Química

<https://scq.iec.cat/15a-edicio-dels-premis-de-batxillerat-guardonats-2021/>

Scientific-Technological High School Diploma (Batxillerat) with honors – Institut Cendrassos

Grade: 9,6 / 10

2019

2nd place at DITMAE on cryptography – Generalitat de Catalunya

Mathematical competition between north Catalonia high schools:
Cryptography: From Arithmetic to Secret Codes

C1 Advanced English language – Cambridge University

06/2021

Honors Distinction PAU – Generalitat de Catalunya

Honors Distinction for University Access Exam

04/2025

Machine Learning Onramp Course – Mathworks