

# Marçal Herraiz Bayó

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LinkedIn • Personal website [↗](#)

Barcelona, Spain

Physics and Mathematics student at the University of Barcelona, currently in the third year of study. I am highly interested in...

## EDUCATION

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<i>Present</i> Sep 2020	<b>BSc in Physics + BSc in Mathematics</b> <i>University of Barcelona, UB</i>
Jun 2020 Sep 2018	<b>Technological Baccalaureate</b> <i>Mireia Centre d'Estudis</i> <ul style="list-style-type: none"><li>- 1<sup>st</sup>-ranked student of the class.</li><li>- GPA: 4.0/4.0</li></ul>

## EXPERIENCE

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Aug 2023 Jul 2023	<b>Summer Research Intern</b> <i>Mathematics Research Center, CRM</i> <ul style="list-style-type: none"><li>- During my participation in the Barcelona Introduction to Mathematical Research program, I engaged in a series of seminars focused on advanced mathematics. Additionally, I had the opportunity to work on a research project centered around transcendental dynamics within the complex exponential family.</li><li>- Supervisors: Dr. Núria Fagella, Dr. Xavier Jarque.</li></ul>
Oct 2019 Jan 2019	<b>Crazy about Physics Program</b> <i>Catalunya La Pedrera Foundation</i> <ul style="list-style-type: none"><li>- Program aimed at first year A-Level students, with special talent and interest in physics, as an introduction to physics research.</li><li>- Worked on the LHC's ATLAS detector, accelerator beam physics, observational cosmology, and quantum computing, among others.</li></ul>

## ADDITIONAL COURSES

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Jul 2023 Apr 2023	<b>Python for Data Science and Machine Learning</b> , Udemy <i>NumPy, Pandas, Matplotlib, Plotly, Seaborn, SciKit-Learn, TensorFlow</i> <ul style="list-style-type: none"><li>- Implemented various machine learning algorithms, including k-means clustering, linear and logistic regression, random forest and decision trees, support vector machines, and neural networks.</li><li>- Certificate of completion <a href="#">↗</a></li></ul>
Jan 2023	<b>Machine Learning with Python</b> , Coursera <i>Regression, Evaluation Metrics, KNN, Decision Trees, SVM, k-means</i> <ul style="list-style-type: none"><li>- Learned the fundamentals of machine learning and studied different algorithms, such as linear and logistic regression, support vector machines, k-nearest neighbors, and decision trees.</li><li>- Certificate of completion <a href="#">↗</a></li></ul>

Dec 2022 Jun 2022	<b>100 Days of Code: The Complete Python Pro Bootcamp</b> , Udemy <i>Data Science, Automation, Game and Web Development, GUI Creation</i> <ul style="list-style-type: none"> <li>- Developed proficiency in Python programming language through building 100 unique projects over 100 days, including automation scripts, web and app development, data science and machine learning models.</li> <li>- Certificate of completion <a href="#">↗</a></li> </ul>
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## AWARDS AND ACHIEVEMENTS

<i>Present</i> Sep 2020	<b>University of Barcelona</b> <span style="float: right;"><i>800 €</i></span> <ul style="list-style-type: none"> <li>- Awarded to students with outstanding academic performance during university.</li> </ul>
Sep 2021 Sep 2020	<b>Generalitat de Catalunya</b> <span style="float: right;"><i>1,700 €</i></span> <ul style="list-style-type: none"> <li>- Awarded to those students with an excellent academic performance during baccalaureate.</li> </ul>

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## LANGUAGES

<b>Spanish</b>	Native Speaker
<b>Catalan</b>	Native Speaker
<b>English</b>	Advanced C1 Level
<b>German</b>	Elementary Level

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## CODING SKILLS

Machine Learning	Data Visualization	Seaborn
Python	Scikit-learn	NumPy
HTML	LaTeX	Pandas
CSS	C	

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## VOLUNTEERING AND ACTIVITIES

- **Science Fellows:** initiative of the Catalunya la Pedrera Foundation to develop science communication activities such as expositions in museums and talks in high schools.
- **Problem Solving:** via books and online resources, solving problems is an activity that I perform, enjoy, and continue to learn on a daily basis.