

CONTACT INFORMATION

Full name: Marcos Manuel Tirador Del Riego  
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I am currently a senior student of Computer Science at the University of Havana, with an expected graduation date of January 2024. I am also a student research assistant under the mentorship of Dr. Felix Gotti. My main research interest is Algebra. Specially, the last 3 years, I have been investigating the phenomenon of non-unique factorizations in integral domains and finite-rank monoids.

EDUCATION

PERIOD	September 2019 — January 2024		
DEGREE	Bachelor of Science in Computer Science		
RANK	To be awarded		
UNIVERSITY	University of Havana	Havana, Cuba	

PERIOD	September 2015 — May 2018		
DEGREE	High School Diploma		
SCHOOL	Vocational Pre-University Insitute of Exact Sciences Vladimir I. Lenin		
	Havana, Cuba		

SCIENTIFIC PUBLICATIONS

- (1) *On the Set of Molecules of Numerical and Puiseux Monoids*  
(with Marly Gotti)  
In: Rings, Monoids and Module Theory, Springer Proceedings in Mathematics & Statistics book series (Eds. A. Badawi and J. Coykendall). Springer, Singapore. Vol. 382 (2022) 111–125, [doi:10.1007/978-981-16-8422-7\\_5](https://doi.org/10.1007/978-981-16-8422-7_5).
- (2) *Factorization in additive monoids of evaluation polynomial semirings*  
(with K. Ajran, J. Bringas, Bangzheng Li & E. Singer)  
Communications in Algebra, Vol. 51:10 (2023) 4347–4362, [doi:10.1080/00927872.2023.2208672](https://doi.org/10.1080/00927872.2023.2208672).
- (3) *Subatomicity in Rank-2 Lattice Monoids*  
(with C. Liu & P. Rodriguez)  
Journal of Commutative Algebra (to appear). Preprint on [ArXiv](https://arxiv.org/abs/2308.12345).

AWARDS

2024	World Finalist at the International Collegiate Programming Contest (ICPC)
2022	Bronze Medal at the XXV Iberoamerican University Mathematical Olympiad

2022	<b>Honorable Mention at the International Mathematics Competition for University Students</b>
2021	<b>Bronze Medal at the International Mathematics Competition for University Students</b>
2021	<b>Gold Medal at the Caribbean Finals of the International Collegiate Programming Contest (ICPC)</b>
2020	<b>Bronze Medal at the Caribbean Finals of the International Collegiate Programming Contest (ICPC)</b>
2018	<b>Bronze Medal at the Iberoamerican Mathematics Olympiad</b>
2017	<b>Honorable Mention at the International Mathematical Olympiad (IMO)</b>
2016	<b>Honorable Mention at the Central American and Caribbean Mathematics Olympiad</b>

## TEACHING EXPERIENCE

PERIOD	<b>February 2022 — Present Day</b>		
TOPICS	<b>Data Structures and Algorithms</b>		
POSITION	<b>Student Assistant</b>		
WHERE	<b>Department of Mathematics and Computer Science</b>	Havana, Cuba	

  

PERIOD	<b>May 2019 — August 2019</b>		
TOPICS	<b>Number Theory, Algebra and Combinatorics</b>		
POSITION	<b>Math Instructor</b>		
WHERE	<b>Cuban teams training for international competitions</b>	Havana, Cuba	

## TECHNICAL SKILLS

*Programming languages:* Python, C#, JavaScript, C, C++, Haskell, Prolog, R (with a higher level of expertise in the first two).

*Others:* .NET Core, ASP.NET, Node.js, React, MySQL, Keras.