

CONTACT INFORMATION

Full name: Marcos Manuel Tirador Del Riego

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I am an instructor of Data Structures and Algorithms in the Computer Science program at the University of Havana. I recently graduated with a bachelor's degree in Computer Science from the University of Havana, supervised by Dr. Felix Gotti and Dr. Luis Ramiro Piñeiro. I have an strong inclination for Mathematics and I am currently working on my application to graduate school in Mathematics. My main research interest is algebra with emphasis on the atomic structure of commutative rings and monoids. During the past 4 years, I have been conducting research in factorization theory under the supervision of Dr. Felix Gotti.

EDUCATION

PERIOD	September 2019 — January 2024
DEGREE	Bachelor of Science in Computer Science
RANK	Top of the class, golden diploma, outstanding in research and academics
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

WORK EXPERIENCE

PERIOD	January 2024 — Present Day
EMPLOYER	Department of Mathematics and Computer Science
JOB TITLE	Researcher and instructor
UNIVERSITY	University of Havana Havana, Cuba

SCIENTIFIC PUBLICATIONS

- (I) *On the set of molecules of numerical and puioux 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) III–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. Ajrán, 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	Honorable Mention at the International Mathematics Competition for University Students
2021	Bronze Medal at the International Mathematics Competition for University Students
2021	Gold Medal at the Caribbean Finals of the International Collegiate Programming Contest (ICPC)
2020	Bronze Medal at the Caribbean Finals of the International Collegiate Programming Contest (ICPC)
2018	Bronze Medal at the Iberoamerican Mathematics Olympiad
2017	Honorable Mention at the International Mathematical Olympiad (IMO)
2016	Honorable Mention at the Central American and Caribbean Mathematics Olympiad

TEACHING EXPERIENCE

PERIOD	February 2024 — Present Day		
TOPICS	Introduction to Programming with Python		
POSITION	Instructor		
WHERE	Department of Mathematics and Computer Science	Havana, Cuba	

PERIOD	February 2024 — Present Day		
TOPICS	Data Structures and Algorithms		
POSITION	Instructor		
WHERE	Department of Mathematics and Computer Science	Havana, Cuba	

PERIOD	February 2022 — January 2023		
TOPICS	Data Structures and Algorithms		
POSITION	Student Assistant		
WHERE	Department of Mathematics and Computer Science	Havana, Cuba	

PERIOD	May 2019 — August 2019		
TOPICS	Number Theory, Algebra and Combinatorics		
POSITION	Math Instructor		
WHERE	Cuban teams training for international competitions	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.