
CONTACT INFORMATION

Full name: Marcos Manuel Tirador Del Riego

Email address: marcosmath44@gmail.com

Website: marcostirador.github.io

SUMMARY

I am a Data Structures and Algorithms instructor in the Computer Science program at the University of Havana, where I also earned my bachelor's degree in Computer Science, under the guidance of Dr. Felix Gotti and Dr. Luis Ramiro Piñeiro. I have an strong inclination for 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.

Within computer science, my preference leans towards theoretical computing, though I have also developed strong practical skills. Generally, I relish tackling complex problems that demand creative thinking. These abilities have served me well in the ICPC, where I am a World Finalist.

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	

PERIOD	February 2022 — July 2022		
JOB TITLE	Fullstack junior developer		
EMPLOYER	D' Clase (private tutoring company)		
	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	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		
TOPIC	Introduction to Programming with Python		
POSITION	Instructor		
WHERE	Department of Mathematics and Computer Science	Havana, Cuba	

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

PERIOD	February 2022 — January 2023		
TOPIC	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#, C/C++, JavaScript, Haskell, Prolog, R (with a higher level of expertise in the first two)
Developer Tools	Git, Docker, Linux Systems
Others	.NET Core, ASP.NET, Node.js, React, MySQL, Keras spaCy, NLTK, scikit-learn

SOFT SKILLS

Fast-learning, critical thinking, problem-solving, creativity, teamwork.

LANGUAGE SKILLS

Spanish	Native Speaker
English	Advanced (Certified by Doulingo English Test)