

Francisco A. Mayorga Cetina

Mathematics professional with a keen ability and willingness to learn.

I have over three years of experience in object-oriented programming (with .NET) and data analysis (with Python).

I am interested in software development, scientific research, and teaching mathematics, as well as digital design and illustration.

Professional Experience

• Analytics Consultant

CALA Analytics, Bogotá D.C., Colombia.

Implementation, documentation, and deployment of analytical tools using Python and SQL.

Development Coordinator

Finanzas y Actuaría (Finac S.A.S), Bogotá D.C., Colombia.

Development team leader on Maintenance and Support area.

Developer II (Senior .NET Developer)

Sii Group Colombia (in the Thales project), Bogotá D.C., Colombia.

Responsible for analyzing, designing, and implementing new features for applications, as well as maintaining or enhancing existing ones, with a focus on optimization, security, and promoting good development practices.

Development Professional II - Software Products

Finanzas y Actuaría (Finac S.A.S), Bogotá D.C., Colombia.

Alongside development tasks, I was responsible for overseeing team activities and efficiently planning and managing resources.

Development Analyst

Finanzas y Actuaría (Finac S.A.S), Bogotá D.C., Colombia.

Analysis, estimation, design and implementation of software development solutions (Winforms and ASP.NET) for the company's applications using .NET technologies.

Sergistas monitors group coordinator

Sergio Arboleda University, Bogotá D.C., Colombia.

Candidate selection, performance evaluation of monitors, and administrative and logistical management.

Continuing Education Teacher: "Talentos matemáticos" Program

Sergio Arboleda University, Bogotá D.C., Colombia.

Courses for students with high capacities for mathematics and technology.

Education

Bachelor of Mathematics

Sergio Arboleda University , Bogotá D.C., Colombia.

Thesis (honorific): Characterizing Dual Graphs Associated to Triangulations of the Caracol Flow Polytope.

Another Certification Courses

- HTML, JavaScript and Services, ITTalent, Bogotá D.C., Colombia. August 2022.
- **UI/UX Cetification Course**, *Programming Hub*, *Online*. November 2021.
- Python 3 Cetification Course, Programming Hub, Online. August 2020.
- Python Advanced Cetification Course, Programming Hub, Online. August 2020.
- Python Cetification Course, Programming Hub, Online. August 2020.
- Learn Python & Ethical hacking from scratch, Udemy, Online. February 2020.

Publications

A unifying framework for the v-Tamari lattice and principal order ideals in Young's lattice

Combinatorica Journal, Springer.

On Framed Triangulations of Flow Polytopes, the v-Tamari Lattice and Young's Lattice

Bar Ilan University, Ramat Gan, Israel.

Séminaire Lotharingien de Combinatoire, Proceedings of FPSAC 2021, Art. 42, 12 pp.

Activities and events

Regional Programming Marathon (South America North) ICPC

November 2019 Contestant, Grancolombian Polytechnic

XXII Colombian Congress of Mathematics

June 2019 Speaker, University of Cauca, Popayán

Poster: Flow polytopes and triangulations of the Caracol polytope.

Cube Challenge Sergista

September 2018, April 2019 Organizer, Sergio Arboleda University

Skills



