

DIEGO ROQUE

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EDUCATION

Massachusetts Institute of Technology Cambridge, MA
Bachelor of Science in Mathematics
Technical courses: Formal Reasoning about Programs, Topology, Measure Theory, Algebra I/II, Analysis, Deep Learning, Graph Theory and Additive Combinatorics, Social Choice and Networks, Algorithmist's Toolkit, Non-credit Category Theory and Topoi Reading Program

AWARDS

International Mathematical Olympiad (IMO) 2010 — 2014

- Historically best ranked Mexican competitor
- **Gold** Medal, 3 Silver Medals, Bronze Medal
- Seven times National Gold medalist

International Olympiad in Informatics (IOI) 2013 — 2014

- Historically best ranked Mexican competitor
- **Gold** Medal, Silver Medal
- Three times National Gold medalist

EXPERIENCE

Tudor Investment Corporation New York, New York
Quant Intern Summer 2017

- Researched machine learning algorithms on financial databases in order to predict asset returns, which were integrated into the overall trading strategy.

MIT Programming Languages and Verification Group Cambridge, MA
Undergraduate Researcher September 2017 — Present

- Develops automatically generated verified solvers for mathematical optimization problems.

Kueski Guadalajara, Mexico
Software Engineer 2015 — 2015

Centre for High Academic Achievement Monterrey, Mexico
Software Engineer Volunteer 2015 — 2016

- Developed an admission system (written in Purescript and Haskell) with statistical methods to evaluate student performance, such as IRT.

Mexican Computing Olympiad Committee Mexico City, Mexico
Teacher December 2015

- Taught an algorithms course for teachers to further their skills and be better at teaching their students.

Mexican Computing Olympiad Committee Mexico
Problem Setter and Training Program Organizer 2015 — 2016

- Wrote part of the tests used to select the Mexican team for the IOI 2015 and 2016, as well as helping with the organization of the selection process.

MIT Nuclear Science and Engineering Department Cambridge, MA
Undergraduate Researcher Fall 2014

IQ+ Monterrey, Mexico
Board Member 2016 — Present

- IQ+ is an educational nonprofit specialized on gifted youth.

Tutor 2014 — 2016

- Tutored three students that went to international olympiads. One student got a bronze at IOI, and the other two got silver at IMO.

Nuevo Leon Mathematics Olympiad Monterrey, Mexico
Teacher 2011 — 2014

SKILLS

Programming Languages: Haskell, Coq, Purescript, Elm, C/C++, Python, Ruby, Javascript, Julia
Languages: Spanish (Native), English (Full Professional), Chinese (Beginner)