Calle Montreal 1326
Guadalajara
Mexico

(52)-811-016-4008

✓ droque@mit.edu

www.diegoroque.me

# Diego Roque

#### Education

2014–2018 **BSc**, *Massachusetts Institute of Technology*, Cambridge, United States. Currently taking a gap year in 2015.

2011–2014 **High School**, *Prepa Tec CCU*, Monterrey, Mexico.

#### Awards

#### International Olympiads

#### International Olympiad in Informatics (IOI).

- Historically best Mexican competitor
- o Gold Medal and first Mexican to get Gold, 26th IOI, Taiwan, July 2014
- o Silver Medal, 25th IOI, Australia, July 2013

#### International Mathematical Olympiad (IMO).

- o Historically best Mexican competitor
- o Gold Medal, 53th IMO, Argentina, July 2012
- o Silver Medal, 55th IMO, South Africa, July 2014
- o Silver Medal, 54th IMO, Colombia, July 2013
- o Silver Medal, 52th IMO, Netherlands, July 2011
- Bronze Medal and youngest Mexican participant ever, 51th IMO, Kazakhstan, July 2010

#### Asian Pacific Mathematics Olympiad (APMO).

- o Gold Medal, 25th APMO, evaluated in Kazakhstan, March 2013
- o Silver Medal, 26th APMO, evaluated in Kazakhstan, March 2014
- o Silver Medal, 24th APMO, evaluated in Japan, March 2012

## Iberoamerican Informatics Competence by Correspondence (CIIC in Spanish).

- o Gold Medal, May 2014
- o Bronze Medal, May 2013

#### Iberoamerican Mathematics Olympiad .

o Gold Medal, 24th edition, Costa Rica, September 2011

#### Centroamerican and Caribean Mathematics Olympiad (OMCC in spanish).

- o Gold Medal, 12th OMCC, Puerto Rico, June 2010
- o Creative Solution Recognition, 12th OMCC, Puerto Rico, June 2010
- o Silver Medal, 11th OMCC, Colombia, October 2009

#### May Mathematics Olympiad.

- o Gold Medal, 16th edition, May 2010
- o Gold Medal, 15th edition May 2009

#### Rioplatense Mathematics Olympiad.

- o Gold Medal, 18th edition, Argentina May 2009
- o Gold Medal, 18th edition, Argentina May 2008

#### National Olympiads

#### Mexican Mathematics Olympiad (OMM).

- Historically best competitor
- o Gold Medal with Perfect Score, 27th OMM, Hidalgo, November 2013
- o Gold Medal, 26th OMM, Guanajuato, November 2012
- o Gold Medal, 25th OMM, San Luis Potosi, November 2011
- o Gold Medal with Perfect Score, 24th OMM, Baja California, November 2010
- o Gold Medal with Perfect Score, 23th OMM, Campeche, November 2009
- o Silver Medal, 22th OMM, Sonora, November 2008
- o Bronze Medal, 21th OMM, Coahuila, November 2007

#### Mexican Computing Olympiad (OMI).

- o Gold Medal, 18th OMI, Mexico State, April 2013
- o Gold Medal, 17th OMI, Sonora, August 2012
- o Gold Medal, 15th OMI, Yucatan, September 2010

#### National Contests for Young Physics Talents.

- o Gold Medal, 7th edition, June 2011
- o Gold Medal, 6th edition, June 2010

#### Other Distinctions

#### Medalla al Mérito Cívico Presea Estado de Nuevo León 2012.

Civic Merit Medal, Nuevo Leon State 2012

Recognition from National Council of Science and Technology and Mexican Mathematics Society for performance in olympiads.

#### Medalla al Mérito Juventud Regia 2010.

Youth Merit Medal, Monterrey 2010

Twelve Recognitions from Nuevo Leon Education Department for performance in olympiads.

Two recognitions from IQ+ for performance in olympiads., IQ+ is an education nonprofit specialized on gifted youth.

### Experience

- 2015–2015 **Software Engineer Intern**, Kueski, Guadalajara, Mexico.
- 2015–2015 **Problem Setter and Training Program Organizer**, *Mexican Computing Olympiad Committee (COMI)*, Mexico.
- 2015–2015 **Software Engineer Volunteer**, *Centre for High Academic Achievement (CARA)*, Monterrey, Mexico.

Developed a rudimentary testing system in Ruby with statistical methods to evaluate student performance, such as IRT. Planning to open source the code.

2014–2014 **Undergraduate Researcher**, *MIT Nuclear Science Department, Computational Reactor Physics Group*, Cambridge, MA.

Developed an unsupervised method of determining source stationarity of Monte Carlo eigenvalue calculations using Machine Learning techniques.

2011–2014 **Teacher**, *Nuevo Leon Mathematics Olympiad*, Monterrey, Nuevo Leon.

I teached mathematics classes geared towards Olympiads for the State organization that was in charge of Olympiads

Languages

Spanish Native

English **Professional** TOEFL 650+

Computer skills

C/C++ 7 Years

Haskell 3 years

Lisp 2 years

JavaScript 1 year

Idris 9 months

Algorithms 4 years

Python 2 years

Ruby 2 years

Scala 9 months

Io language 6 months

References

 $\label{lem:https://www.dropbox.com/sh/et8ntc9s2cjdj8t/AADyMiglmiEdZ8rP4WVWdFSRa?dl=0 Recognitions and Diplomas$