

Melanie Sclar

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Summary

Computer Scientist, Latin American champion in the 39th ACM-ICPC World Finals, Mathematics olympiad champion and former Facebook intern. Experienced in problem solving and complex algorithms and looking forward to expanding my knowledge and improving my skills in the field.

Work Experience

Lead Data Scientist at BrightSector Algorithms

August 2018 - present

Lead the team of Data Science & ML, that focuses mainly on Named Entity Recognition of technical attributes of Mercado Libre's publications. We are also in charge of classifying publications, clustering all of them that refer to the same product. Mercado Libre is the biggest e-commerce site in Latin America.

Data Scientist & Machine Learning Engineer at BrightSector Algorithms

January - July 2018

Software Engineer Intern at Facebook Inc.

January - April 2016

Worked in the Video Encoding Team, on video stabilization algorithms. Researched various methods to understand when stabilization is necessary and saving computing time while preserving the video's quality when it is not needed.

Software Engineer Intern at Facebook Inc.

January - April 2015

Worked in the Public Content Ranking Team, developing algorithms to improve the quality of recommendations on videos and articles shown in newsfeed. These algorithms were based on sentiment analysis and trending topic detection.

Teacher Assistant at University of Buenos Aires

March 2014 - July 2017

Responsible for assisting students with their inquiries (involving class projects and exercises) and grading exams and projects. Taught mainly in Algorithms and Data Structures III.

Coach for Mathematics Olympiads

March 2012 - October 2016

Argentine Model School (2013-2016), Martin Buber School (2013), Carlos Pellegrini School (2012)

Honors and Awards

International Awards

Latin American Champion and First to Solve Problem F award in the 39th Annual World Finals of the ACM International Collegiate Programming Contest (ACM-ICPC) in Marrakech, Morocco (2015).

Champion in the South America/South Regional Contest of the ACM-ICPC (2013 and 2014).

Third place in the South America/South Regional Contest for the ACM-ICPC (2012).

Bronze Medal in the 26th Iberoamerican Mathematical Olympiad (2011) in San Jose, Costa Rica.

Silver Medal in the 21st Southamerican Mathematical Olympiad (2010) in São Paulo, Brazil.

National Awards in Argentina

First, third and second place in Argentine Programming Tournament (TAP) (2014, 2013 and 2012 respectively).

Second place in the Interuniversity Argentine Mathematics Competition (CIMA) (2016).

National Champion in Argentine Olympiad in Mathematics (OMA) (2011).

National Subchampion in Argentine Olympiad in Mathematics (OMA) (2008).

National Awards in Machine Learning

First place and second place in Almundo's ECI competition (2017 and 2018 respectively). ECI is the University of Buenos Aires's Invernal Computing School, that currently has an AI track.

Patents

Sclar, M., Puntambekar, A., Coward, M.H. and Parsons-Keir, W.D., Facebook Inc, 2018. *Foreground detection for video stabilization*. U.S. Patent Application 15/395,983.

Sclar, M., Puntambekar, A., Coward, M.H. and Parsons-Keir, W.D., Facebook Inc, 2018. *Neural network to optimize video stabilization parameters*. U.S. Patent Application 15/396,025.

Volunteer experience

Organizer and teacher of programming competitions' training events July 2014 - ongoing
Taught in four two-week long events aimed at university students that want to improve their skills in competitive programming, as well as several events aimed at high school students.

Organizer of programming and mathematical competitions July 2012 - ongoing
Organizer of 15+ mathematical olympiads since 2012 and of the Argentinian Programming Tournament since 2016. Main organizer of 2019 South America Topcoder Open Regionals.

Education

University of Buenos Aires 2012-2018
Licenciada en Ciencias de la Computación,
equivalent to Bachelor of Computer Science +MSc. G.P.A. 9.65/10

Dissertation: "Analysis and Prediction of Human Visual Search". This project consisted of creating an algorithm involving machine learning and bayesian modelling to predict the most likely paths that human gaze will make when searching for an object in an image. Publication pending.

University of Buenos Aires 2012-ongoing
Currently pursuing Licenciatura en Ciencias Matemáticas,
equivalent to Bachelor of Mathematics +MSc. G.P.A. 9.00/10

Superior School in Commerce "Carlos Pellegrini" - University of Buenos Aires 2007-2011
High School Degree with Accounting Specialization. G.P.A. 9.02/10

Machine Learning courses
Machine Learning at Computer Science Department, UBA.
Markov Processes applied at Applied Mathematics department (Instituto del Cálculo), UBA.

Skills

Programming Languages

C / C++	Upper intermediate, 7 years exp.
Python	Upper intermediate, 4 years exp.
Java	Upper intermediate, 2 years exp.
Matlab	Intermediate, 3 years exp.
PHP / Hack	Intermediate, 2 years exp.
Haskell	Basic, 2 years exp.
Bash	Basic, 2 years exp.

Spoken Languages

Spanish	Native Proficiency
English	Full professional proficiency
Portuguese	Full professional proficiency
French	Limited working proficiency