# Facundo Molina

# PERSONAL INFORMATION

PLACE AND DATE OF BIRTH: Carnerillo - Córdoba - Argentina — 1994 August 12

NATIONAL IDENTIFICATION NUMBER: 37.488.945 NATIONALITY: Argentinian

Address: Río Cuarto - Córdoba - Argentina

PHONE: +54 9 358 4838631

Email: fmolina@dc.exa.unrc.edu.ar

LINKEDIN: https://www.linkedin.com/in/facundo-molina/

GITHUB: https://github.com/facumolina

#### EDUCATION

#### 2012 - 2014 B.S. in Computer Science

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

THESIS PROJECT: Project in the course of Distributed and Outsourced

Software Engineering AVERAGE SCORE: 9,33

#### 2012 - 2017 M.S. in Computer Science

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

THESIS PROJECT: Automatic Learning of Relational Specifications using

Evolutionary Computation Average score: 9,43

## 2017 - Ph.D. in Computer Science

PRESENT Software Engineering - Formal Methods - Machine Learning

The main research direction is the application of machine learning techniques to

program analysis tasks.

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

## TEACHING BACKGROUND

August 2014 - Student Teaching Assistant

NOVEMBER 2014 COURSE: Data Structures and Algorithms

 $Department\ of\ Computer\ Science\ -\ FCEFQyN$ 

University of Río Cuarto - Argentina

March 2015 Student Teaching Assistant

- June 2015 Course: Algorithm Design Techniques

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

August 2015 - Student Teaching Assistant

November 2015 Course: Programming Paradigms

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

March 2016 Student Teaching Assistant

- June 2016 Course: System Design and Analysis

 $Department\ of\ Computer\ Science\ -\ FCEFQyN$ 

University of Río Cuarto - Argentina

August 2016 - Student Teaching Assistant

November 2016 Course: Programming Paradigms

 $Department\ of\ Computer\ Science\ -\ FCEFQyN$ 

University of Río Cuarto - Argentina

March 2017 Student Teaching Assistant

- June 2017 Course: Algorithm Design Techniques

 $Department\ of\ Computer\ Science\ -\ FCEFQyN$ 

University of Río Cuarto - Argentina

March 2018 Teaching Assistant

- June 2018 Course: Computability and Complexity

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

August 2018 Teaching Assistant

- Present Course: Distributed and Outsourced Software Engineering

Department of Computer Science - FCEFQyN

University of Río Cuarto - Argentina

### **PUBLICATIONS**

NOVEMBER 2016 An Evolutionary Approach to Translate Operational Specifications

into Declarative Specifications - Facundo Molina, César Cornejo, Renzo Degiovanni, Germán Regis, Pablo Castro, Nazareno Aguirre and Marcelo Frias Proceedings of the 19th Brazilian Symposium on Formal Methods

SBMF 2016, Natal, Brazil, November 22-25, 2016.

SBMF 2016 Best paper award.

May 2018 From Operational to Declarative Specifications using a Genetic

Algorithm - Facundo Molina, Renzo Degiovanni, Germán Regis, Pablo Castro,

Nazareno Aguirre and Marcelo Frias

Proceedings of the 11th International Workshop on Search-Based Software Testing,

SBST@ICSE 2018, Gothenburg, Sweden, May 28-29, 2018.

SBST 2018 Best paper award.

September 2018 A Genetic Algorithm for Goal-Conflict Identification

Renzo Degiovanni, Facundo Molina, Germán Regis and Nazareno Aguirre Proceedings of the 33rd ACM/IEEE International Conference on Automated Software Engineering, ASE 2018, Montpellier, France, September 3-7, 2018.

## Courses

February 2015 Description Logic Reasoning - Dr. Anni-Yasmin Turhan

Summer School of Computer Science RIO 2015

University of Río Cuarto - Argentina

February 2015 Fundamentals of Quantum Programming Languages - Dr. Alejandro Díaz-Caro

Summer School of Computer Science RIO 2015

University of Río Cuarto - Argentina

February 2016 Symbolic Program Analysis - Prof. Willem Visser

Summer School of Computer Science RIO 2016

University of Río Cuarto - Argentina

February 2016 Systematic Test Case Generation - Prof. Sarfraz Khurshid

Summer School of Computer Science RIO 2016

University of Río Cuarto - Argentina

March 2016 Software Testing - Dr. Renzo Degiovanni

June 2016 Main software testing techniques using state-of-the-art tools

Postgraduate courses

University of Río Cuarto - Argentina

February 2017 Human Dynamics: Data, Networks and Modelling - Dr. Márton Karsai

Summer School of Computer Science RIO 2017

University of Río Cuarto - Argentina

August 2017 Text Mining - Dr. Laura Alonso Alemany

NOVEMBER 2017 Text Mining techniques applied to Natural Language Processing problems (Word

similarity, Document clustering, Sense discrimination, Machine translation)

Postgraduate courses

University of Córdoba - Argentina

September 2018 Neural Networks - Dr. Francisco Tamarit

Present Mathematical foundations of artificial neural networks

 $Postgraduate\ courses$ 

University of Córdoba - Argentina

#### EXPERIENCE

APRIL 2015 Software Engineer

- Present SMF Consulting S.L

Semi remote position providing software solutions based on the Openbravo ERP platform using technologies suchs as Java, PostgreSQL, Oracle, Hibernate, JavaScript, Mercurial.

http://smfconsulting.es

Spain

# TECHNICAL SKILLS

Most experienced languages Java, C, C++, Python, JavaScript

OTHER KNOWN LANGUAGES Shell, Haskell, Lisp, Eiffel

USED FRAMEWORKS Spring, Sklearn, NodeJS, AngularJS

USED IDES Eclipse, VisualStudio, AndroidStudio

DATABASES PostgreSQL, MySQL, Oracle, MongoDB

Version Control Systems Github, Mercurial, Subversion

PROJECT MANAGEMENT SOFTWARE Maven, Ant

# LANGUAGES

SPANISH: Mother language

English: Fluid