## Personal Data

Last and First Name: Moresi, Marco Date of Birth: 24 of May, 1992

E-mail Address: mrc.moresi@gmail.com

Phone: +543516876950 Citizen of: Argentina.

Personal Web: http://marcomoresi.com

#### Academic Record

**2019:** Masters in Computer Science<sup>1</sup>, Facultad de Matemática, Astronomía, Física, y Computación (FAMAF), Universidad Nacional de Córdoba (UNC). Córdoba, Argentina. Thesis Director: Dr. Benotti Luciana, MSc. Gomez Marcos. Topic of the thesis: Automatic modeling of learning path: When to generate formative feedback for beginners in programming?. Dissertation Mark: 10 over 10.

**2016:** Bachelor in Computer Science<sup>2</sup>, Facultad de Matemática, Astronomía, Física, y Computación (FAMAF), Universidad Nacional de Córdoba (UNC).

## Research Experience

**2018 - now: Member of the research project:** "Deep Educational Data Analysis" .Director Dra Luciana Benotti. Begin 2018 Main task: process exercises solutions submitted in a online platform to teach programming. Mumuki. In order to generate automate formative feedback.

**2018 - now: Member of the research project:** "Automatic dialogue processing to improve task success". Director Luciana Benotti. Begin: 2018: End: 2022. Financed by Secretary of Science and Technology. Universidad Nacional de Córdoba. Resolution SeCyT-UNC 411/18.

### 2014 - 2016: Outreach program member UNC plus plus:

Teacher assistant at K-12 teacher's development program. The goal of this program is to improve K-12 education for low resource students and teachers.

# Optional and Postgraduate courses

2019: Automatic Dialogue Processing, Luciana Benotti. On going.

**2019: Natural Language Processing**, Franco Luque and Laura Alonso Alemany. On going. **2019: Deep Learning Specialization**, deeplearning.ai, Andrew Ng (Coursera.org). On going.

<sup>&</sup>lt;sup>1</sup> The Computer Science Masters Degree in Argentina is "Licenciado en Ciencias de la Computación"

<sup>&</sup>lt;sup>2</sup> The Computer Science Bachelor Degree in Argentina is "Analista en Ciencias de la Computación"

**2018: Machine Learning by Stanford University on Coursera,** Andrew Ng (Coursera.org), Mark obtained 96,1 over 100.

**2018: Neural Networks,** Francisco Tamarit (FAMAF - Universidad Nacional de Córdoba), FAMAF, Argentina. Mark: 10 over 10.

**2017: Machine Learning for Computer Vision,** Jorge Sánchez (FAMAF - Universidad Nacional de Córdoba), FAMAF, Argentina. Mark: 9 over 10.

**2017: Distributed Programming on Large Volumes of Data**, Damián Barsotti (FAMAF - Universidad Nacional de Córdoba). Mark: 9 over 10.

**2016: Consistency under Replication in Distributed Databases.** Alejandro Tomsic, (FCEN-Universidad de Buenos Aires).

**2016: Hybrid information extraction systems**. Pablo Duboue (FCEN- Universidad de Buenos Aires).

### Scientific Publications

- Marco Moresi. Automatic modeling of learning path: When to generate formative feedback for beginners in programming?. Masters Thesis in Computer Science<sup>3</sup>, Facultad de Matemática, Astronomía, Física, y Computación (FAMAF), Universidad Nacional de Córdoba (UNC). Córdoba, Argentina.
- Marcos J. Gómez, Luciana Benotti, Marco Moresi. Block-based programming in elementary school: A comparative study of programming abilities in children with and without block-based experience. Submitted in January 2019 in 24th Annual Conference on Innovation and Technology in Computer Science Education, ITiCSE 2019. Approved, Camera Ready.
- 3. Marco Moresi. Marcos J. Gómez. 2018 Automated formative feedback generation in teaching Programming applied to Mumuki. Poster published in Primeras Jornadas Argentinas de Didáctica de la Programación (Jadipro). Universidad Nacional de Quilmes
- 4. M. Cecilia Martinez, Marcos J. Gómez, Marco Moresi y Luciana Benotti. Lessons Learned on Computer Science Teachers Professional Development. Proceedings of the 21th ACM Annual Conference on Innovation and Technology in Computer Science Education. ACM. Areguipa, Perú. 2016. Pages 159-164.

# Personal Scholarships and Awards

**2018: Completion Master scholarship funded by Google:** Workplace: Facultad de Matemática Astronomía Física y Computación. Universidad Nacional de Córdoba.

**2016: Outreach scholarship** financed by the outreach program UNC plus plus. Universidad Nacional de Córdoba.

<sup>&</sup>lt;sup>3</sup> The Computer Science Masters Degree in Argentina is "Licenciado en Ciencias de la Computación"

**2015: Outreach scholarship** financed by the outreach program UNC plus plus. Universidad Nacional de Córdoba.

## Participations at Conferences

**June 2018:** Participation in "Argentine Conference on Didactics of Programming". Universidad Nacional de Quilmes, Buenos Aires, Argentina.

**July 2016:** Participation at "21th Annual Conference on Innovation and Technology in Computer Science Education", Association for Computing Machinery, Arequipa, Perú.

**July 2016:** "Computer Science Winter Schools" at Facultad de Ciencias Exactas y Naturales - Universidad de Buenos Aires 2016.

## **University Community Outreach**

**2018 - now: Teaching Assistant** at a Professional Development course for High School teachers in Programming and Computer Science at FAMAF, Universidad Nacional de Córdoba, in partnership with the National Ministry of Science.

**2016 - now: Teaching Assistant** at a Professional Development course for High School teachers in Programming and Computer Science at FaMAF, Universidad Nacional de Córdoba, in partnership with Instituto Superior de Estudios Pedagógicos de la Provincia de Córdoba

**2016 - now: Teaching Assistant** of programming and computer science at secondary schools. National Ministry of Science.

**2015 - 2016: University teaching position, Teaching Assistant**: at FAMAF, Universidad Nacional de Córdoba. At the courses Discrete Mathematics I, Introductory Course.

**2014 - 2016 University teaching position, Teaching Assistant** at Instituto Terciario Simón Bolivar. At the course "Programming III"

# Volunteering

**2016: Open day of the Universidad Nacional de Córdoba,** Oral Dissertation about professional development in Computer Science Degree. FAMAF - Universidad Nacional de Córdoba

## **Programming Tools**

Languages: Python, C, C++, Scala.

Frameworks: Django, Django Rest, Flask.

Libraries: Scikit-learn, Keras, Tensorflow, OpenCV, NLTK, Pandas, Numpy, Seaborn,

Matplotlib.

Misc. Tools: Svn, Git, Jupyter Notebook, Apache Zeppelin.

# Corpora and Software Development Projects

### 2018 - Now: Programmer at Deep Educational Data Analysis.

Using the open web-based coding tool Mumuki, which includes programming exercises and is used by several universities and schools in Argentina, we collected a 1 millon entry dataset with students programs in order to build a machine learning model that provides automated formative feedback. https://mumuki.io/

#### 2016 - Now: Freelance Developer in SocialBits:

Software developer back end web services. Technologies used: Django, Python, Django Rest and others. https://www.socialbits.net/

### 2016 - 2018: Backend Developer in MuyShopper

Backend developer in MuyShopper. MuyShopper is a web platform designed to compare home appliances prices in differents Argentinian online web stores. Technologies used: Python, Django, Scrapy. https://www.muyshopper.com/

## References

People you can ask for references about me:

### Luciana Benotti

Facultad de Matemática, Astronomía, Física y Computación from the Universidad Nacional de Córdoba.

Argentinean National Scientific and Technical Research Council (CONICET).

Relation to candidate: Master thesis director

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+54 9 351 611 20 76

## Laura Alonso Alemany

Facultad de Matemática, Astronomía, Física y Computación from the

Universidad Nacional de Córdoba.

Relation to candidate: Teacher of undergraduate course and postgraduate course.

lauraalonsoalemany@unc.edu.ar