MATÍAS LEANDRO MARENCHINO

CONTACT DETAILS

Telephone number: +54 9351 2775364 Email address: mlmarenchino@gmail.com

SUMMARY

Software developer with a strong academic background, problem solving skills and industrial experience. Low and high level development with teamwork abilities. Interests in Computer Vision, Machine Learning, Natural Language Processing and Big Data.

EDUCATION

University of Maryland, College Park Master of Science in Computer Science.

College Park, Maryland

Grade average: 3.85.

2015

Thesis: "Source Code Reduction to Summarize False Positives."

Universidad Nacional de Córdoba

Licentiate in Mathematics.

Córdoba, Argentina

Grade average: 9.75 on a 10 scale.

2013

Thesis: "Fuzzy Measures in Image Processing."

Universidad Nacional de Córdoba

Licentiate in Computer Science.

Córdoba, Argentina

Grade average: 9.21 on a 10 scale.

2011

2006

Thesis: "Implementation of techniques to derive counterexamples in PRISM, the

model checker."

FELLOWSHIPS AND AWARDS

Argentine Presidential Fellowship administered by Fulbright Commission to pursue a Masters degree in the United States.

"Premio Estudiantil Cordobés" given by the Government of the Province of Córdoba, for the best grade in the undergraduate degree of "Licenciate in Mathematics" at Universidad Nacional de Córdoba.

PROFESSIONAL AND ACADEMIC EXPERIENCE

Mahisoft. Working for auction.com.

Data Engineer (October 2018 – Present)

- Developing the data pipelines for the company. Technologies: nifi, oozie, spark, kafka, bigquery, HDFS, Hive.
- Migrating the data lake to AWS. Services: Athena, Glue, S3, EC2, EMR, Lake

Formation.

University of Cordoba (Universidad Nacional de Córdoba)(July 2018 - Present) Instructor

• Co-teaching "Supervised Learning" and "Time Series Analysis" courses for the "Certification in Data Science, Machine Learning and its Applications" graduate program.

Intel Security - McAfee.

Security Data Science Software Engineer / Technical leader (November 2015 – September 2018)

• Design and development of the corporate solution MPower for the detection of attacks, including advanced attacks. Data analysis and implementation of machine learning solutions, mainly supervised learning methods for the detection of uncommon activity in logs files and company registries. Technologies used: python, scikit-learn, pyspark, redis, neo4j

SpotThis.com

Computer Vision Developer (October 2015 – October 2018)

• Development of an apparel recommendations engine based on items similarities obtained from images. Technologies used: python, scikit-learn, caffe2, AWS EC2, S3, docker, mysql, redis

University of Maryland, College Park.

Graduate Research Assistant (January 2015 – August 2015)

• Reducing False Positives Reported by Static Code Analysis Tools, with Prof. Adam Porter. In order to reduce the number of false positives that Static Analyzers report, we proposed a supervised learning system to classify the warnings into true positives and false positives by means of features extracted from the program source code. A system to reduce source code in order to characterize Static Code Analysis tools false positives was implemented in Python. The technique used considerably reduces the source code size and it is feasible to use it to characterize false positives.

Ascentio Technologies S.A. Working for CONAE (Argentinian Space Agency) **Team Leader / Scrum Master** (November 2012 – August 2013)

• Development of a C++ framework for the synchronization of spacecraft telecommands and telemetry.

Software Developer (March 2009 – November 2012)

- Design and implementation of Argentinian SAC-D satellite instruments data processors. Prototypes implemented in Python, operative systems in Python and C++.
- Development in Java for the Spacecraft Operations Planning subsystem of Falda del Carmen ground station.
- Operations in Falda del Carmen ground station.
- Member of Aquarius/SAC-D Flight Engineering and Operations Group (from a year

TEACHING EXPERIENCE

Conae (Argentinian Space Agency). (August 2016 – December 2016) Masters in Development of Aerospace Related Applications Instructor in the course of Generation and Validation of Products.

University of Maryland, College Park. (August 2013 – December 2014)

Computer Science Department.

Teaching assistantship in the following courses:

- Introduction to Compilers (2013).
- Object-Oriented Programming I (2014).
- Object-Oriented Programming II (2014).

Tutor.com. (February 2006 – August 2009)

Online tutoring for high school and undergraduate students.

Universidad Nacional de Córdoba. (March 2004 – March 2007)

Department of Math, Astronomy and Physics

Teaching assistantship in the following courses:

- Numerical Analysis I (2004).
- Mathematical Analysis II (2004 and 2006).
- Algebra I (2005).
- Algebra II (2005).
- Mathematical Analysis I (2006).

PUBLICATIONS

S.Masuelli, M. Labanda, M. Marenchino and M. Jacob: "The big melt in Greenland during summer 2012 detected by MWR aboard SAC-D/Aquarius". AGU Fall Meeting. December 2012. USA.

CONFERENCE PRESENTATIONS

Presentation in the 7th Aquarius/SAC-D Satellite Science Meeting (April 2012). Buenos Aires, Argentina. Title: "CONAE's Data Processors and Distribution". Presentation in the 1st Regional Meeting in Image Processing (December 2011). Córdoba, Argentina. Title: "The instruments of Aquarius/SAC-D satellite and its data processing".

SELECTED COURSEWORK (MSc Computer Science, UMD)

Artificial Intelligence Planning (2013), Computer Processing of Pictorial Information (2013), Robots Learn Manipulating Actions (2014), Computational Linguistics I (2014), Computational Linguistics II (2015), Fundamentals of Software Testing (2014).