Jeremias Rodriguez

jeremiaslcc@gmail.com · +549 3462 662768 · github.com/jere1882

Rosario, Argentina

EDUCATION

Master's Degree in Computer Science *2022*

Universidad Nacional de Rosario, Argentina

Current grade average: 9.50 out of 10

Bachelor's Degree *2017*

Universidad Nacional de Rosario, Argentina

Grade average: 9.52 out of 10

INTERESTS

- Neural networks, deep learning, Gaussian processes, ensemble methods.
- Unsupervised learning.
- Machine learning applied to astronomy and robotics.
- Data science.

COURSEWORK

- Data Mining, Machine Learning, Artificial Intelligence.
- Software Engineering, Data Structures, Databases.
- Combinatorial Optimization, Graph Theory.

PROJECTS

- **RRL Detection** [github.com/jere1882/RRL]
  This is my master's thesis. Classification of variable stars in modern astronomical datasets.(Python ; scikit-learn)
- **NetTalk** [github.com/jere1882/NetTalk]
  Transform text to phonetics using neural networks. (R)
- **NachOS** [github.com/jere1882/NachOS]
  Educational operating system. (C++)

LANGUAGES

- **English** - Proficient
  - Cambridge Certificate of Proficiency in English
    Issued Dec. 2020, Grade A
  - Cambridge Certificate in Advanced English
    Issued Dec. 2018, Grade A
- **Spanish** - Mother tongue

EXPERIENCE

- **iRobot Corporation** *April 2019 - Present*
  Software Engineer - Remote contractor
  - Currently working on a new SLAM system for Roomba. Currently participating on the transition from an Extended Kalman Filter SLAM to a Graph-SLAM approach. (C++, Python)
  - I regularly analyse and extract data from automated telemetry reports sent by millions of customer's robots. (Mode Analytics, Python, R, SQL)
  - Worked on long term probabilistic mapping for vSLAM-based robots. (C++)

  Reference: mllofriu@irobot.com, +598 92 766 250
  Dr. Martin Llofriu, Principal Robotics Scientist
- **iRobot Corporation** *April 2018 - April 2019*
  Robotics Intern - Pasadena, CA, US
  - Developed a long-term probabilistic WiFi mapping system, which is currently being used by Roomba and Braava robots. (C++)
  - Researched the use of gaussian processes to model WiFi RSSI data and aid vSLAM in challenging situations. (C++ / R)

  Reference: mariomu@ieee.org .
  Dr. Mario E Munich, former VP of Adv. Development
- **Plantium S.A.** *December 2017 - March 2018*
  Software Engineer - Rosario, Argentina
  - Worked on the SBOX7 and SBOX11 products, used for autonomous precision agriculture. (QT / C++)

  Reference: amoreno@plantium.com .
  Eng. Ariel G. Moreno. Chief Software Architect.

SUMMER SCHOOLS

- **The Cornell, Maryland, Max Planck Pre-doctoral Research School**
  Max Planck institute, Germany
  Aug 2019