Dr. Eng. BARRACHINA, J. Agustin

Machine Learning | Signal Processing

📞 +33 07 66 10 78 33   ✉ JoseAgustin.Barra@gmail.com   🌐 negu93.github.io   📍 Italian - Argentinian
/NEGU93   in/in/jose-agustin-barrachina   /5931672/agustin-barrachina
/0000-0002-2139-514X   /profile/Jose-Agustin-Barrachina

I am a Ph.D. Engineer looking for work in the fields of **AI / Machine Learning** doing **development** (not research). Preferably in Paris. I would like to work in a development team and learn about team working strategies like Agile, Sprints, etc.

EXPERIENCE

PhD Thesis

Complex-Valued Neural Networks for Radar Application

📅 Oct 2019 – Present   📍 Paris, France

Machine Learning for radar applications.
At CentraleSupélec, 50-50% shared scholarship from DGA and ONERA. Please refer to Publications and Repository sections for more information.

`Python` `Tensorflow`

Fast Electronics Internship

📅 Sep 2018 – Mar 2019   📍 Grenoble, France

Optimized the data acquisition sample rate for Mimac-FastN
github.com/NEGU93/CYUSB3KIT-003_with_SP605_xilinx

`C/C++` `VHDL`

Software System Engineer Intern

📅 Nov 2017 – Apr 2018   📍 Buenos Aires, Argentina

Service Provider for AMX (Claro)

`CCNA`

Summer Internships

📅 Jan 2016 – Feb 2016   📅 Jan 2015 – Feb 2015
📍 Bariloche, Argentina   📍 Paris, France

REPOSITORY   ⭘ github.com/NEGU93/cvnn

⭐ 62 stars   👁 6 watching   ⑂ 16 forks   ⓘ 30 Reported Issues

Toolbox for implementing Complex-Valued Neural Networks using Tensorflow as backend. Imported in 2 repositories within GitHub and 50 views per day on average (Sep 2022); +190 anaconda and 24 Zenodo downloads; Installable with PIP and Anaconda; Documented with ReStructured Text (online in Read the Docs); Tested with pyTest; Subject of 31 personal emails.

PUBLICATIONS

7 Publications (9 counting submission not yet accepted): 1 Journal at Springer, 4 International IEEE conferences (ICASP, IGARSS, MLSP, ICIP), 1 national conferences (GRETSI), 1 Workshop (SONDRA). 2 submitted papers to Journals. 5 citations excluding my own references.

🎓 3MT IEEE GRSS Excellence in Technical Communication
Student Prize Award finalist University of Queensland.

💬 Reddit r/MachineLearning – WAYR (What are you reading).
Most upvoted paper week 116.

🏆 Ranked **top 15% reviewer score** on IEEE MLSP 2021 publication.

TEACHINGS

Tenured Professor. Digital Signal Processing.   `C/C++` `ASM`
📅 Oct – Dec 2019, 2020 & 2022 📍 Ecole Polytech Paris-Sud
Teaching assistant. Introduction to Python   Neural Networks
📅 Sep 2019 – Oct 2019   📍 IUT Orsay   📅 Jul 2017 – Dec 2017   📍 ITBA
`Python`   `Python` `Tensorflow`

EDUCATION

ITBA

Electronical Engineering
Focus on Signal Processing
📅 Mar 2012 – Jul 2018
Academic performance: 7.14 / 10 (top 2 over 26)
Ranking   2 / 26 (top 95%)

École Polytechnique

International Exchange Program
📅 Sep 2016 – Mar 2017
Academic performance: 16.84 / 20

COMPETITIONS

🏆 **Hackathon** JPMorgan Chase & Co.
3rd prize over 20 participants
Rank   3 / 20 (top 90%)
Note: Only team on top 3 without a software eng

🏆 **IEEEXtreme 24-Hour Programming Competition**

Edition	Performance
15.0	313 / 5561 (top 94%)
11.0	391 / 3350 (top 88%)
9.0	275 / 2035 (top 86%)
8.0	536 / 1853 (top 71%)

Note: editions 11.0 and 15.0 I participated alone (normally it is in teams of 3)

🏆 **ITBA electronics exhibition**
3 times participant awarded as best project by several companies including Schneider Electric

🏆 **IEEEXtreme Practice IEEE – ITBA**
Rank   2 / 15 (top 93%)

🏆 Invictus in the **Argentinian Math Olympiad (OMA).**
Several times participant.

PROGRAMMING

Language	
Java	github.com/NEGU93/Compilation
Python	github.com/NEGU93/LipSync; github.com/NEGU93/cvnn
Matlab	github.com/NEGU93/Steganography
C/C++	github.com/NEGU93/ForbiddenDesert
VHDL	
Asm	
Web	github.com/NEGU93/negu93.github.io

(JavaScript, TypeScript, Angular, HTML, CSS)

LANGUAGES

🇪🇸	Spanish	Native
🇬🇧	English	Cambridge CAE C1	TOIEC 940 / 990
🇫🇷	French	DELF A2	TCF B2