

JOÃO G. M. ARAÚJO

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EDUCATION

Bachelor in Computer Science

University of São Paulo

Jan 2018 – Jan 2023 São Carlos, BR

- GPA: 9.3/10.0, Ranked 3rd out of 118.
- Advanced Coursework: Evolutionary Systems Applied to Robotics, Introduction to Neural Networks, Advanced Topics in AI, Advanced Algorithms

Coursera Specializations

Coursera and DeepLearning.ai

Sep 2019 – Dec 2019 Coursera

- Deep Learning Specialization
- Tensorflow in Practice Specialization

RESEARCH

Research Internship

Dec 2019 – Feb 2020 University of Tsukuba

- Researched about using Neural Architecture Search to design soft robots
- Implemented a novel OpenAI gym environment for the softbot morphology design task
- Implemented different Neuro Evolution methods, analysing both the designed soft robots and the evolved network topologies

Deep Learning Research

Mar 2019 – Present University of São Paulo

- Doing Undergraduate Research with funding from FAPESP, one of the most prestigious scholarships in Brazil
- Generating stochastic images to fool Inception and ResNet
- Studying the latent space of the Imagenet trained Networks
- Applying Neural Networks to feature learning, specifically using ResNet for visual feature extraction and YOLOv2 for semantic feature extraction

PROJECTS

Open Source Contributions

Aug 2019 – Present Github

- Merged more than 30 pull requests
- Contributed with new code, bug fixes and documentations to Swift for Tensorflow, Tensor2Tensor, JAX, Flax, Rlax and Google Research's Dex, a new experimental machine learning focused language

Data: Data Science Group

Mar 2019 – Present University of São Paulo

- Leading the Deep Learning Study Group
- Got first place on the first in-class competition (individual)
- Got third place on the second competition (three-person group)

Deep Learning Course

Feb 2019 – May 2019 University of São Paulo

- Taught a 25-hours Deep Learning course using frameworks with different levels of abstraction
- Used Numpy to give a good low level understanding of Neural Nets and FastAi and Keras for more complex architectures and concepts
- Got students more excited and prepared to learn Deep Learning on their own and now they are being invited to prestigious AI conferences and getting great results in Data science competitions on Kaggle

Cofounder and Content Creator at CodCad

Aug 2016 – Jan 2019 www.codcad.com

- Website that teaches competitive programming for free.
- Wrote more than 20 lessons and 60 problems for the site
- Was awarded People's Choice Award in Microsoft Imagine Cup 2017.
- Reached more than 3700 users, 100 000 graded solutions and 2000 000 views in less than 2 years.

AWARDS & EVENTS

- Khipu AI (2019, Uruguay):** Invited to participate in the first edition of the largest Artificial Intelligence gathering and summer school in Latin America
- Datathon (2019, Brazil):** My team won Best Solution and Best Business proposal in Philip Morris Datathon
- IOI (2018, Japan):** Represented Brazil with other 3 students at the international Olympiad in Informatics, a competition with 335 students from 84 countries
- Scientific Olympiads (Brazil):** More than 30 medals in Scientific Olympiads between 2011 and 2017, with 2 gold medals in the Brazilian informatics Olympiad (2012 and 2017) and 3 in the Brazilian mathematics Olympiad (2012-2014)
- Modern Mathematics Summer School (2017, Germany)** Invited to an international event that teaches advanced mathematical topics and had students from over 30 countries

SKILLS

Languages:

Portuguese: Native, English: Advanced

Programming:

2 years of Python, Keras, C and C++

6 months of Google JAX, Tensorflow, Java, Javascript, HTML and CSS