# CV

# Leonardo Blanger

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## education

### University of Sao Paulo, Brazil - Institute of Mathematics and Statistics

- MSc in Computer Science. March 2018 to October 2020.
- Supervisor: Prof. Dra Nina S. T. Hirata.
- Sao Paulo Research Foundation Scholarship.
- Focused on Machine Learning applied to Computer Vision.
- Worked with Deep Learning for Object Detection and GAN based image generation.
- **Dissertation project:** Managed to achived good Object Detection results (in Average Precision), using significantly less labeled data, by designing a sample synthesis pretraining initialization strategy.

### Integrated Regional University, Erechim, Brazil

- BSc in Computer Science. 2013 to 2017.
- Academic Merit, class of 2017. Average score of 9.08 / 10.
- Special focus on Algorithms and Data Structures design and analysis.
- Engaged on the ACM-ICPC programming competitions. Won the sub-regionals and reached the national finals three times.

# professional experience

### NeuralMind Artificial Intelligence, Campinas, Brazil

- Data Scientist, December 2020 to now.
- Works with Machine Learning for document recognition.

#### Compasso Technologies, Erechim, Brazil

• Software Development Internship, May 2014 to October 2014.

# additional experiences

#### Westfälische Wilhelms-Universität Münster, Germany

- Research Internship. October 2019 to March 2020.
- Supervisor: Prof. Dr. Xiaoyi Jiang
- Worked with GAN based sample synthesis for Object Detection.

#### University of Sao Paulo, Brazil - Institute of Mathematics and Statistics

- Tutoring for the Algorithm Analysis course (MAC5711). August 2018 to November 2018.
- Tutoring for the Introduction to Machine Learning course (MAC0460). March 2019 to July 2019.

# general skills

#### Main

- Machine Learning for Computer Vision. Strong experience in Object Detection.
- Algorithms and Data Structures design and analysis.
- Deep Learning techniques in general.

#### Minor Skills

- Natural Language Processing
- Generative Image Models, GANs
- Statistics.

### technical skills

- Programming Languages: Python, C++ (good understanding), Java (basic understanding)
- Frameworks: Tensorflow, Pytorch, scikit-learn, huggingface transformers, opency, and overall ML ecosystem (pandas, matplotlib, numpy, ...)
- Additional: Object Oriented programming, intermediate Linux and Bash Shell scripting, Latex, git, dvc.

# open source projects

- detr\_tensorflow Tensorflow port from the original Pytorch implementation of the paper *End-to-End Object Detection with Transformers*
- RefineDet\_tensorflow Tensorflow implementation of the RefineDet architecture. Managed to replicate the paper's results.

(both on Github)

# publications

Blanger Leonardo, and Nina S. T. Hirata. "An Evaluation of Deep Learning Techniques for Qr Code Detection". 2019 IEEE International Conference on Image Processing (ICIP). IEEE, 2019.

Blanger Leonardo, Junior Valmir, Jevinski Clair J., Panisson Alison R., and Bordini Rafael H. "Improving the Performance of Taxi Service Applications using Multi-Agent Systems Techniques". 2017 Meeting on Artificial and Computational Intelligence (ENIAC). Brazil, 2017.

## achievements

- Current. Codeforces rating: 2138 (Master), max. rating: 2138 (Master).
- 2017. 23th place ACM ICPC programming contest, Latin American regional/Brazilian national finals.
- 2016. 2<sup>nd</sup> place Tecnomate Libres 2016 programming contest, UTN Santa Fe, Argentina.
- 2016. 18th place ACM ICPC programming contest, Latin American regional/Brazilian national finals.
- 2015. 24<sup>th</sup> place ACM ICPC programming contest, Latin American regional/Brazilian national finals.

# languages

- English (fluent)
- Portuguese (native)

## relevant books that i read

- Hands-On Machine Learning with Scikit-Learn and TensorFlow Aurélien Geron
- Learning from Data Yaser Abu-Mostafa, Malik Magdon-Ismail, Hsuan-Tien Lin
- Reinforcement Learning, an Introduction (2nd ed) Richard S. Sutton, Andrew G. Barto
- The Algorithm Design Manual Steven S. Skiena
- OpenIntro Statistics Christopher Barr, David M. Diez, and Mine Çetinkaya-Rundel

## relevant links

- Contact e-mail: leonardoblanger@gmail.com
- Personal webpage: https://leonardo-blanger.github.io
- Linkedin: https://www.linkedin.com/in/leonardo-blanger
- Github: https://github.com/Leonardo-Blanger
- Codeforces profile: https://codeforces.com/profile/Leonardo\_Blanger
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