Rafael Claro Ito

Electrical Engineer
HW & SW Developer
Data Scientist

- 03/02/1992
- Rua Gilberto Pattaro, 150 · 13084-375
- Campinas, SP · Brazil
- +55 19 98810-2615
- ito.rafael@gmail.com
- linkedin.com/in/itorafael
- github.com/ito-rafael
- facebook.com/ito.rafael92
- ito.rafael92

Languages

- English   ● ● ● ● ● ●
- Portuguese ● ● ● ● ● ●
- Italian   ● ● ● ● ○ ○
- French   ● ● ● ○ ○ ○
- Spanish   ● ● ● ○ ○ ○
- Japanese   ● ○ ○ ○ ○ ○

Awards

- 2009 6th place at OSA
- 2009 Silver Medal at OBMEP
- 2008 Silver Medal at OBMEP
- 2008 Certificate of Merit at OMU
- 2007 Honorable Mention at OBMEP
- 2006 Honorable Mention at OBMEP

OBMEP: Brazilian Public Schools Mathematics Olympiad
OSA: UNICAMP Physics Olympiad
OMU: UNICAMP Mathematics Olympiad

Education

Graduate

University of Campinas

📅 Jan 2017 – current   📍 Campinas/SP

Part-time Masters degree without being officially enrolled.

Subject		Credits	Professor(s)	Semester	Grade
IA353A	Redes Neurais	4	Fernando José Von Zuben	1s2020	in progress
IA376E	Tópicos Em Engenharia de Computação VII ↪ Redes Neurais Profundas Para Processamento de Linguagem Natural	4	Roberto de Alencar Lotufo	1s2020	in progress
IA006C	Tópicos em Sistemas Inteligentes II ↪ Aprendizado de Máquina	4	Levy Boccato Romis Ribeiro de Faissol Attux	2s2019	A
IA368N	Tópicos em Engenharia de Computação V ↪ Introdução à Robótica Móvel	4	Eleri Cardozo Eric Rohmer	2s2017	A
IA750A	Engenharia de Reabilitação	4	Antonio Augusto Fasolo Quevedo	2s2017	A
IA368W	Tópicos em Engenharia de Computação V ↪ Métodos Estocásticos Para Robótica Móvel	4	Eleri Cardozo Eric Rohmer	1s2017	A
IE327P	Tópicos Especiais em Microeletrônica III ↪ Sensores, Condicionamento e Aquisição de Dados	4	Elnatan Chagas Ferreira	1s2017	A

*table information in Portuguese

Undergraduate

University of Campinas

📅 Jan 2011 – Dec 2016   📍 Campinas/SP

Subject		Credits	Professor	Semester	Grade
EA999A	Tópicos em Egenharia de Computação ↪ Curso Teórico-Prático de Redes Neurais Convolucionais	4	Roberto de Alencar Lotufo	Férias de Verão 2020	8.9

*table information in Portuguese

Undergraduate (Student Exchange Program)

Queen Mary University of London

📅 Sep 2014 – Aug 2015   📍 London

Studies sponsored by the Brazilian government due to academic merit. Science without Borders (SwB) student exchange program.

Further Education

Technical College of Campinas - UNICAMP

📅 Jan 2007 – Jul 2010   📍 Campinas/SP

Selected to work as a Teaching Assistant of the technical course.

Machine Learning Portfolio

Jupyter notebooks:

Computer Vision:

- MNIST: Linear Classifier
- MNIST: Extreme Learning Machine (ELM)
- MNIST: Multilayer Perceptron (MLP)
- MNIST: ConvNet (CNN)
- Transfer Learning: Cats and Dogs
- Transfer Learning (last layer): Fruits360
- Transfer Learning (fine tuning): Fruits360

Natural Language Processing (NLP):

- Language Model
- Sentiment Analysis (IMDb dataset) using:
  - Bag-of-Words
  - TF-IDF
  - Simplified Self-Attention
  - Transformer (Encoder only)
  - BERT
- T5 English to Portuguese Translator

Video Processing:

- YOLO   ...in progress
- MobileNets   ...in progress
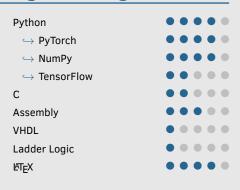
One-page papers summary:

*available only in Portuguese

- "A Neural Probabilistic Language Model", 2003 📄
  ↪ summary:
- "A Unified Architecture for Natural Language Processing: Deep Neural Networks with Multitask Learning", 2008 📄
  ↪ summary:
- "Efficient Estimation of Word Representations in Vector Space", 2013 📄
  ↪ summary:
- "Deep Learning", 2015 📄
  ↪ summary:
- "Effective Approaches to Attention-based Neural Machine Translation", 2015 📄
  ↪ summary:
- "Attention Is All You Need", 2017 📄
  ↪ summary:
- "BERT: Pre-training of Deep Bidirectional Transformers for Language Understanding", 2019 📄
  ↪ summary:
- "Exploring the Limits of Transfer Learning with a Unified Text-to-Text Transformer", 2019 📄
  ↪ summary:
- "The Curious Case of Neural Text Degeneration", 2019 📄
  ↪ summary:

Rafael Claro Ito

Electrical Engineer
HW & SW Developer
Data Scientist

Programming Skills

Python   ● ● ● ● ○
  ↪ PyTorch   ● ● ● ● ○
  ↪ NumPy   ● ● ● ● ○
  ↪ TensorFlow   ● ● ● ○ ○
C   ● ● ● ○ ○
Assembly   ● ● ● ○ ○
VHDL   ● ● ○ ○ ○
Ladder Logic   ● ○ ○ ○ ○
LaTeX   ● ● ● ● ○

Softwares Experiences

- Linux
- MATLAB/Octave
- Git
- Docker
- Jupyter Notebooks
- Anaconda
- Ansible
- Zabbix
- Qt
- CodeWarrior
- Kinetis Design Studio
- Quartus (Altera)

Embedded Systems

- BeagleBone Black
- Raspberry Pi
- FRDM-KL25Z FRDM-K64F
- Arduino
- FPGA

References

⚖ **João da Silva**
Head of blah

· **Relação:** ex-boss
· **contato:** joao.silva@gmail.com

💼 **Fulano Beltrano**
Professor at Unicamp

· **Relação:** ex-professor
· **contato:** fulanobeltra@gmail.com

Working Experience

Technological Development Analyst
CNPEM/LNLS
📅 Jan 2016 – current   📍 Campinas/SP

Blah

Teaching Assistant
University of Campinas
📅 Jan 2016 – Jul 2016   📍 Campinas/SP

Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Etiam lobortis facilisis sem. Nullam nec mi et neque pharetra sollicitudin. Praesent imperdiet mi nec ante. Donec ullamcorper, felis non sodales commodo, lectus velit ultrices augue, a dignissim nibh lectus placerat pede. Vivamus nunc nunc, molestie ut, ultricies vel, semper in, velit. Ut porttitor. Praesent in sapien. Lorem ipsum dolor sit amet, consectetuer adipiscing elit. Duis fringilla tristique neque. Sed interdum libero ut metus. Pellentesque placerat. Nam rutrum augue a leo. Morbi sed elit sit amet ante lobortis sollicitudin. Praesent blandit blandit mauris. Praesent lectus tellus, aliquet aliquam, luctus a, egestas a, turpis. Mauris lacinia lorem sit amet ipsum. Nunc quis urna dictum turpis accumsan semper.

Scientific Research
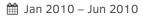#### Queen Mary University of London
📅 Jun 2015 – Sep 2015   📍 London

blabljdbjsdl bksdjblsdblds bjsd bkljsd blksjd blksdj blsd jblsd blksdjb lksdj blkds jblskd bjsdbjksdl bjlsdjblsd jblsdb sdlk bjlds jbsdkl bdsjl bkldsj blsd lbj s dblsdb sd kbj sdlkbjdskl bjdskl jbldsj b

Electronics intern
CPqD - Telecommunications Research and Development Centre
📅 Jan 2010 – Jun 2010   📍 Campinas/SP

bla

Teaching Assistant
Technical College of Campinas
📅 Jan 2009 – Dec 2009   📍 Campinas/SP

bla

Publications

October 2019	**Exploring Embedded Systems' Dedicated Cores for Real-Time Applicatio** *P. H. Nallin, G. R. S. Franco, R. C. Ito, and A. R. D. Rodrigues* 17th Int. Conf. on Accelerator and Large Experimental Physics Contro (ICALEPCS'19)
New York, USA October 2019	**Software and Hardware Design for Controls Infrastructure at Sirius Ligh** *G. R. S. Franco et al.* 17th Int. Conf. on Accelerator and Large Experimental Physics Contro (ICALEPCS'19)
New York, USA	