Sadi Kneipp Neto

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Education

Computer Science BSc, emphasis on Machine Learning
Universidade de São Paulo *July 2015 – Aug 2019*

Experience

Experian Latin America DataLab
Summer Data Science Intern, Whitepaper: https://goo.gl/88FSBv *Jan 2017–Apr 2017*
- Developed bus traffic analysis models based on months of GPS data from São Paulo's public transportation buses. Applied Machine Learning methods in Python to split the city in regions by bus stop density and detected possible flaws on itinerary planning.
- Evaluated the possibility of position estimation from passive wifi packets with 4 RPis as antennas and an ESP8266 as emitter.

Data Science Intern *Aug 2017–June 2018*
- Optimized wifi model for multiple antennas and built an autonomous calibration robot on top of a GoPiGo open-source Python-controlled kit. Robot position was estimated with encoders, compass and gyroscope sensors.
- Implemented a parallelized ensemble classifier for low-false-positive hotword spotting by using SnowBoy from kitt.ai and Sphinx.

University College London
Undergraduate Research, Department of Computer Science, Prof David Barber *Oct 2018–Mar 2019*
- Work focused on bayesian and deep-learning approaches, deployable to mobile devices, to the previous research with auscultation-based diagnosis. Funded by USP's Innovation center and Boehringer Ingelheim.

Extracurriculars

Summer Course @ Stanford University
SCI 52: Artificial Intelligence: An Introduction to Neural Networks and Deep Learning *Jul 2018 – Aug 2018*
- Took SCI 52 with the first prize scholarship from HackathonUSP 2018.1. Course about cutting edge Deep and Reinforcement Learning applications and how AI is modifying society and industry, both inside big companies and startups.

MedIA *Mar 2018 – Today*
- Founder of MedIA, a startup dedicated to apply machine learning to predictions from medical notes. Pre-accelerated by SAMSUNG Ocean and by Hospital Das Clinicas (largest public latin-american hospital). Recently secured an initial grant from USP.

Undergraduate Research
Professor Renato Vicente, PhD, *Jun 2017–Today*
- Implemented and quantified performance of several advanced Machine Learning methods on heart and lung disease detection from stethoscope recordings, such as auto-encoders for anomaly detection and feature generation through wavelet transforms.
- Partnership with Boehringer Ingelheim, one of the world's leading research-driven pharmaceutical companies.

Robotics Team: https://thunderatz.org/
Member of the ThundeRatz Robotics Team - Polytechnic School of USP *Mar 2015–Mar 2018*
- Worked on the development of a traffic cone labeling dataset through a web app for an autonomous robot project. Dataset was used to train a YOLOv2 Convolutional NN and deployed with very robust results to a Nvidia Jetson, enabling live recognition.
- Led the Bot Hockey team (radio controlled robots to play 3v3-5-minute hockey matches) and Spintronic (the team's smallest combat bot with 150 grams). Managed project members and helped on ARM and AVR C microcontroller programming.
- Earned seven prizes on projects of national and international competitions, including the First Place Bot Hockey at Robogames 2016 in California, one of the largest international robotics competitions in the globe.

Teaching Experience *Jul 2016–Jul 2017*
- TA for Classical Mechancis.Conduced weekly office hours, created exercise lists and gave supplementary classes on advanced topics.
- Voluntary Physics teacher and mentor at a cost free college admission exam prep school with 150 low-income students yearly.

Awards

Cambridge Hack 2019: https://devpost.com/software/isthismypoison *Jan 2019*
- Best Hardware Hack. Alexa skill controlling a RPi, webcam and cloud model that helps elderly people identify the right pill.

Hack the North 2018: https://devpost.com/software/htn2018 *Sep 2018*
- Full sponsorship to HTN 2018, Canada's largest Hackathon. Developed Ëquiliberate, a live deep learning hack to fix poor posture.

USP Hackathon 2018.1: https://github.com/d-nery/BUSPAgora *Jun 2018*
- 1st place. Awarded a summer course at Stanford University. Created an app to estimate population density wth Wi-Fi IoT devices.

Experiance Jam 4 Hackathon *Oct 2017*
- 1st place. R$10k prize. Developed a top-performing model to predict chance of success on lawsuits against Banco Votorantim, one of the biggest Brazilian banks, based on raw unstructured judicial texts

Summer Camp Scholarship
Brilliant.org https://brilliant.org/profile/sadi-h4cn8s/ *Jul 2014*
- Awarded a scholarship to the Adventures of The Mind Summit by community contributions to the brilliant.org problem-solving website. AoTM is a 2-week program of talks with Nobel and Pullitzer prizes, famous engineers and artists at Oxy College, California.

Physics Olympiads
- Brazil Nationals: Gold (2012, top 20), Silver (2014, top 60) and Bronze (2013, top 120); Lat. Am. Undergrad: Bronze (2018)

Languages: Portuguese (Native), English (Fluent, TOEFL 112/120)

Programming: Python (4 years), C (2 years), R (1 year), Java (1 year)