Sadi Kneipp Neto

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Education

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

Experience

Google **Seattle, WA**
Software engineer, Multipod *April 2023–Currently*
- Enabling training of the largest models in the world on distributed TPU hardware.

Microsoft **Redmond, WA**
Software engineer, AI Platform - Developer Division *Feb 2021–Currently*
- Designed, iterated and shipped internal Azure resource APIs to enhance the development cycle of ML systems. These changes made the on-boarding of new ML scenarios go from months to weeks inside Developer Division. Using C# and Python.

Nubank **São Paulo**
Data Scientist *April 2019–September 2020*
- Nubank is the largest Fintech out of China, with a current valuation of US$30 billion.
- Led a project to enable automatic retraining on customer support interaction tagging models using **Kubeflow** to interact with data pipelines, model training and deployment resulting in savings in the order of millions of dollars monthly. Talk in portuguese: (https://youtu.be/Uatob9eVDGw).
- Built the first semi-supervised model in the company for text classification with **Snorkel**.
- Worked as maintainer/contributor of Nubank's open source Functional ML lib (https://bit.ly/2EgC7z8).
- Used **Scala** (mostly spark), **Python** (xgboost, pytorch, kubeflow pipelines, package development) and **Clojure** (microservices).

University College London
Research Intern, Department of Computer Science, Prof David Barber *Oct 2018–Mar 2019*
- Built an end to end pipeline of lung audio classification with bayesian and deep learning methods (CNN-LSTM) for disease detection. Funded by USP's Innovation center and Boehringer Ingelheim. Dealt with **Python** (mostly pytorch, sklearn, pandas).

Experian Latin America DataLab
Data Science Intern *Aug 2017–June 2018*
- Developed bus traffic analysis models based on months of GPS data from São Paulo's public transportation buses. Applied simple Clustering methods in **Python** to split the city in regions by bus stop density and detected possible flaws on itinerary planning.
- Developed a model (sklearn based) for position estimation from the intensity of passive wifi packets with 4 RPis as antennas and an ESP8266 as emitter, calibrated with a GoPiGo robot kit.

Extracurriculars

Undergraduate Research
Professor Renato Vicente, PhD, *Jun 2017–Jul 2019*
- Implemented and quantified performance of several 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.

In person 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.

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

Hack Cambridge 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.

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 (5 years), Scala/Spark (2 years), C# (1 year), C/C++ (1 year), Clojure (1 year)