Pedro Vitor Soares Gomes de Lima

EDUCATION

Federal University of Pernambuco   Recife, Brazil
MSc in Biomedical Engineering   *Mar 2021 – Mar 2023*
> Thesis title: Clinical decision support system for the diagnosis of skin cancer and Hansen's disease using digital image analysis and deep neural networks.

Federal University of Pernambuco   Recife, Brazil
BSc in Control and Automation Engineering   *Apr 2014 – Nov 2020*
> Undergraduate thesis title: Building a MATLAB application for repetitive controller projects.

National Polytechnic Institute of Toulouse   Toulouse, France
Electrical and Automation Engineering   *Aug 2018 – Jul 2019*
> Spent a full academic year as a Visiting Undergraduate Student.

RESEARCH AND TEACHING EXPERIENCE

Federal University of Pernambuco   Recife, Brazil
Graduate Student   *Mar 2021 – Mar 2023*
- The aim of my project was to investigate the use of deep neural networks for skin lesion image analysis and classification. The outcome was a clinical decision support system for the early diagnosis of skin cancer and Hansen's disease, considering reports from healthcare professionals and adapted to the reality of Brazil.
- Participated in a research group and collaborated in managing the machine learning experiments to support the diagnosis of Covid-19 based on hematological and biochemical tests.
- Main techniques employed: supervised and unsupervised learning, transfer learning, feature selection, resampling, and statistical analyses.

Federal University of Pernambuco   Recife, Brazil
Teacher   *Feb 2017 – Dec 2019*
- Undergraduate Teaching Assistant in the Control Systems Engineering course (50+ students from the penultimate year of Electrical Engineering and Control and Automation Engineering). Prepared review and problem-solving sessions, assisted students with test preparation, and explained topics through MATLAB simulations.
- Taught early robotics concepts to high school students from state schools in a small town located +100 km from the university as part of a University Extension Program.
- Taught in courses offered by departments of the university during school breaks: Arduino (60 hours), LaTex (30 hours), and MATLAB (4 hours).

AWARDS AND ACHIEVEMENTS

CAPES: Study abroad scholarship awarded to outstanding undergraduate students through the BRAFITEC (Brasil France Ingénieur Technologie) program. **€10,900**. Sep 2018 - Jun 2019.

PROEXC/UFPE: Development of academic teaching, research, and extension activities in state public schools through the Institutional Research, Education and Extension Program (PIPEX). **€750**. Feb 2017 - Dec 2017.

SKILLS

Programming: Python, C, Shell Scripting, SQL, MATLAB.
Machine Learning: Scikit-Learn, Keras, TensorFlow, Weka.
Technologies: Git, Docker, Cloud Computing.
Languages: Portuguese (Native), English (Professional), French (Professional).

Work Experience

Weduu Soluções em Data Analytics
São Paulo, Brazil (Remote)

Data Integration Analyst
Jun 2023 – Present

- Company focused on solutions to improve the relationship between the CPG industry and its customers, ranging from automating order entry to recommendation systems.
- Develop, test, and maintain data integration flows while creating documentation and ensuring compliance with data governance policies.
- Implement techniques to improve data quality and address the challenges arising from integrating data from multiple sources.

beAnalytic Business Intelligence
Natal, Brazil (Remote)

Data Engineer
Jul 2022 – Jun 2023

- Provided consulting and outsourcing BI and data engineering services, serving companies from 15+ segments.
- Automated manual tasks, reducing execution time from days to minutes.
- Developed, tested, and maintained data pipeline architectures to unify information from different source systems.
- Collaborated with business intelligence analysts on developing reporting, dashboards, and other BI solutions.

EHC Engenharia Clínica
Fortaleza, Brazil

Clinical Engineering Analyst
Oct 2021 – Dec 2021

- Managed the maintenance of a clinical laboratory with 20+ branches and 500+ biomedical equipment.
- Developed risk management documentation related to the daily operations in the laboratories.

Comau do Brasil Facilities
Goiana, Brazil

Engineering Assistant
Dec 2019 – Oct 2021

- Monitored and controlled energy consumption in Jeep Assembly Plant (production estimated at 1000 cars/day).
- Collaborated on implementing energy efficiency projects based on the energy management standard ISO 50001.

Extracurricular Experience

Federal University of Pernambuco
Recife, Brazil

Robotics Team Leader
Jan 2016 – Jul 2018

- Created and monitored the team's strategic plan (30+ members).
- Collaborated in the development of an open-source line-following robot simulator, resulting in four publications in conference proceedings.
- Organized the Brazilian Robotics Olympiad in Pernambuco (state of Brazil). The Olympiad is fully free for participants (1000+ middle/high school students) and has the mission of promoting robotics among Brazilian students with or without previous knowledge of robotics.

Federal University of Pernambuco
Recife, Brazil

Aeromodelling Team Member
Jan 2015 – Dez 2015

- Optimized aeromodel project to align with competition rules and ensure competitive performance.
- Conducted cost analysis for purchasing materials for the aeromodel.

Hobbies

Running, Reading, Travelling.