# IGOR GUSEV

# Higher education & qualifications

### University of São Paulo (USP)

Jan. 2015 – Dec. 2019

B.Sc. in Applied Mathematics: Specialization in Control and Automation

transferred from

## University of São Paulo (USP)

Jan. 2020 - Jul. 2021

B.Sc. in Applied and Computational Mathematics: Specialization Mechatronics and Mechanical Systems

concluded

## University of São Paulo (USP)

Jul. 2023 - Present

M.Sc. in Statistics

ongoing

#### Interests

• Machine Learning

• Artificial Intelligence

Statistics

• Data Analysis

#### Technical skills

- Python (Numpy, Pandas, Scikit-Learn, TensorFlow, Matplotlib, Scipy, Keras, Pytorch, Seaborn, Concurrent.futures)
- R (dplyr, odbc, DBI, stringr, parallel, Rstan, ggplot2)
- SQL (Queries, INSERT, MERGE, JOIN (INNER, LEFT, RIGHT and FULL), GROUP BY, RANK, LEAD, LAG)
- ETL (Apache Airflow, Spark, python requests)
- C (pointers, lists, stacks, queues, trees, assembly)
- Matlab (Simulink, statistical and data analysis)
- Data Visualization (Tableau, Power BI, EXCEL)
- ML APIs (Auto ML, Hugging Face, OpenAI GPT, Azure)

#### Academic research projects

# Investigation of the role of neural networks | Final Project

2020

- Theoretical investigation
- Implementation of a neural multilayer network
- Analysis of intermediate layers: overfitting, topological deformations and weight attribution.
- Application to periodic series, finding parallels between Neural Networks and Fourier transform.

# Experience WeMind

#### • Data cleaning

Set. 2021 - Abr. 2022

- Data cleaning
- Time Series Analysis
- Data clustering
- Training algorithms (Scikit-learn)
- Model construction and Bayesian inference (Rstan)

#### Ionic Health

Set. 2022 - Feb. 2023

- Customer segmentation (Scikit-learn)
- Mapping medical protocols to international standards (FuzzyWuzzy)
- Helium level forecasting for MRI machines (TensorFlow)

#### <u>Languages</u>

English: Advanced
Russian: Native
Portuguese: Native