

Bruno Gomes Coelho

brunogomescoelho.github.io/
github.com/BrunoGomesCoelho

bruno.gomes.coelho@usp.br
Mobile : +55 19 983364459
linkedin.com/in/bruno-coelho-277519129/

EDUCATION

- **University of São Paulo (USP), ICMC** Campus of São Carlos, Brasil
Bachelor's degree in Computer Science; Emphasis in Data Science; GPA: 8.8/10.0 Feb. 2016 – Dec. 2019 (predicted)

WORK EXPERIENCE

- **University of São Paulo, ICMC** São Carlos, São Paulo
Research Assistant - international scholarship Mar 2017 - Present
 - **Processing:** Transformed raw audio data (mosquito's wingbeats) into structured data using time series analysis.
 - **Classifying:** Evaluated different models (tree classifiers, deep neural networks, SVMs, etc.) to classify different insect species; achieved highest classification accuracy (99%) in our yearly milestone report.
 - **Final Product:** Smart mosquito trap prototype, with the final product still being developed with financing from the United States Agency for International Development.
- **Birdie** São Carlos, São Paulo
Data Science Intern Aug 2018 - Feb 2019
 - **Data Acquisition:** Acquired more than 1 million e-commerce products through crawlers; Extraction of useful features from unstructured textual data.
 - **Machine Learning:** Created a hierarchical structure of product categories using transductive ML models; Deployed the models as micro-services and scalable internal libraries for processing 10 million+ daily products.

MAJOR PROJECTS

- **Finalist of the Data Science Games 2018** May 2018 - Set 2018
 - **Qualification Phase - Kaggle competition:** Analysed the bond market with data provided by BNP Paribas; Predicted customer interest in a bond using diverse data, from customer data to international market information; Final result in the top 30 worldwide from 220 participating universities, guarantying a place in the final.
 - **Final - 2 day hackaton:** Used e-commerce data to help predict customer interest in online shopping; Achieved original's company baseline in less than 30 hours.
- **Co-founder of DATA - Extracurricular Data Science Group** September 2018 - Present
 - **Co-Founder:** Creating and structuring a extracurricular data science group recognised by the university
 - **Teaching:** Weekly classes teaching basic Machine Learning concepts (statistical learning theory, K-NN, Linear Regression, SVMs, etc) and frameworks (numpy, pandas, seaborn, scikit-learn) to a class of 30 students.
- **Data Mining Cup - International ML competition** April 2019 - June 2019
 - **About:** Placed 19th from 149 Teams from 114 universities in 28 countries - Best team from Brazil.
 - **Challenge:** Classifying food retailer self checkout data as fraudulent or not. Dealing with very small amounts of training data and a test set 100x bigger.

SIDE PROJECTS

- **Invited workshop member:** One of only 2 graduate students chosen for the week long "5th Mathematics Solutions Workshop for Industrial Problems"
- **Programming Tutor (12 months):** Taught programming (JavaScript and HTML) to underprivileged communities.
- **Tutor (8 months):** Personal mentor to student, helped to build a study plan and schedule, provided feedback.

TECHNICAL SKILLS

Languages: Python, SQL, C, Java

Frameworks: SciPy, Scikit-Learn, Pandas, Seaborn

Technologies: BeautifulSoup, Scrapy, Git, Docker, Airflow, Jupyter

AWARDS

- Honourable mention on best article at USP's International Symposium of Undergraduate Research - International Stage, presenting researched conducted on optimising classifier parameters for insect data sets.
- Recipient of Academic Featured Student (2016), for students with a cumulative GPA above 9.0/10.0. About 7 in each 100 students are awarded each year.