

FREDSON SILVA DE SOUZA AGUIAR

Brazilian | Single | 24 years
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Objective

I seek the opportunities to make a difference through professional and academic interchange, and the study of topics related to mathematics and its applications.

Academic Training

2023 - 2024: Escola de Matemática Aplicada (FGV/EMAp)

Master's Degree in Mathematical Modeling
University Average Grade (GPA): N/A

2018 - 2022: Escola de Matemática Aplicada (FGV/EMAp)

Bachelor of Science in Applied Mathematics
University Average Grade (GPA): 3.64

2014 - 2018: Instituto Federal do Rio Grande do Norte (IFRN)

Information technology technician, Integrated to High School
High School Average Grade (GPA) acumulado: 3.71

Professional Experience

jun/2021 - nov/2021: Internship - IBM Brazil

Area: Natural Language Processing; Repair and Publication of Language Data

jan/2021 - feb/2021: Summer Job - Bank BOCOM BBM

Area: Data Science, Credit Analysis and Automation for Financial Data

aug/2019 - jul/2021: Scientific Initiation - PICME/CNPQ

Area: Natural Language Processing; Semantic Representations and Ontologies

Events Participation

sep/2024: First SaC3

Area: Modeling and Numerics in Epidemiology

sep/2024: XLII CNMAC

Area: Applied and Computational Mathematics

mar/2024: XIV BrazOpt

Area: Theoretical and Computational Continuous Optimization

fev/2024: EAGxLatinAmerica 2024

Area: Effective altruism; AI Safety and AI Governance

fev/2024: Condor Camp 2024

Area: Career Acceleration; AI Safety and AI Governance

jan/2024: Tropical Probabilistic AI School 2024

Area: Probabilistic Machine Learning and Artificial Intelligence

sep/2019: IAASA Systems Analysis and the Americas Conference

Area: Systems Analysis and the Americas Conference

aug/2019: IMPA 32th Brazilian Mathematics Colloquium

Area: 32th Brazilian Mathematics Colloquium

Relevant Knowledge

Data Science; Neural Networks and Deep Learning; Reinforcement Learning; Optimal Control and Dynamic Programming; Mathematical Modelling; Applied Mathematics.

Relevant Publications

Hugo Gonalo Oliveira, Fredson Silva de Souza Aguiar, and Alexandre Rademaker. On the Utility of Word Embeddings for Enriching OpenWordNet-PT. In 3rd Conference on Language, Data and Knowledge (LDK 2021). Open Access Series in Informatics (OASlcs), Volume 93, pp. 21:1-21:13, Schloss Dagstuhl – Leibniz-Zentrum für Informatik (2021) <https://doi.org/10.4230/OASlcs.LDK.2021.21>

Relevant Projects

Fredson S S Aguiar. A Case Study on Inverse Optimal Control and Model Predictive Control for Autonomous Decision Making Under Timely Distributional Shift. Condor Fellowship. In progress. [Link](#).

Fredson S S Aguiar. Optimal Control Theory towards Safe Reinforcement Learning: a comprehensive review. In progress. Condor Fellowship. [Link](#).

Extra-curricular Activities

aug/2024 – current: Teaching Assistant – FGV/SEPEMAp

Area: FGV/EMAp PhD Introduction to Functional Analysis

mar/2024 – jun/2024: Teaching Assistant – FGV/SEPEMAp

Area: FGV/EMAp PhD Qualitative Theory of ODEs

aug/2023 – dec/2023: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Masters Multivariate Analysis

aug/2023 – dec/2023: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Undergrads Partial Differential Equations

aug/2023 – dec/2023: Teaching Assistant – FGV/EMAp

Area: FGV/EPGE Undergrads Computing for Economy

mar/2023 – jun/2023: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Undergrads Complex Calculus

aug/2022 – dec/2022: Teaching Assistant – FGV/EPGE

Area: FGV/EPGE Undergrads Computing for Economy

aug/2022 – dec/2022: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Undergrads Real Analysis

aug/2020 – dec/2020: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Undergrads Discrete Mathematics

feb/2020 – jun/2020: Teaching Assistant – FGV/EMAp

Area: FGV/EMAp Undergrads Vectorial Calculus

Volunteer Activities

aug/2023 – current: Coordinator – FGV/SEPEMAp

Area: FGV/EMAp Graduate Student Seminars

feb/2020 – nov/2020: Volunteer Teacher – Amplia FGV

Area: FGV/Amplia Social Project Volunteer Teacher