João Pedro Vasconcelos Teixeira

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Education

Universidade Federal da Paraíba - UFPB   João Pessoa, Brazil
B.S. in Computer Engineering - GPA: 3.6   *July 2018 – Present*

Work Experience

Data Science Intern   Recife, Brazil
Aplicativos de Bolso   *Mar. 2021 – Present*
- Updating Sofia, a Deep Learning based recommender system that assists Law Students to pass on the OAB examination (Brazilian Bar examination), the engine recommends questions to the users according to their performance on the application's simulations

Combinatorial Optimization Developer   Bordeaux, France
Atoptima   *Dec. 2020 – Mar. 2021*
- Contributed to the development of Camina, an Open-source Vehicle Routing Problem Solver, in Julia Language, which outputs the optimal set of routes for a given fleet of vehicles to visit a given group of customers
- Developed heuristics and new features that improved Camina time performance and reduced computational cost to be equivalent to C/C++ solvers, such as VRPSolver
- Created Unit Tests, and Benchmark demonstrations for different Vehicle Routing Problems (VRP), such as Capacitated VRP and VRP with Time Windows

Data Engineering Intern   João Pessoa, Brazil
ARIA Laboratory - UFPB   *Apr. 2020 – Present*
- Improving the data infrastructure of the Department of Finance of the State of Paraíba and developing a tool that uses artificial intelligence to detect tax fraud
- Responsible for the administration of the data lake, including the creation of data loaders, new tables, users groups, setting permissions, and sensitive data anonymization with PostgreSQL Anonymizer
- Implemented a product research engine using PostgreSQL Full-Text Search, which increased the time performance by 45%

Software Engineering Intern   João Pessoa, Brazil
LAVID - UFPB   *Sep. 2019 – Dec. 2019*
- Collaborated on the development of a Distributed Collaborative Video Surveillance System for the Federal University of Paraíba
- Built an Event-Driven Logging for the distributed system using Apache Kafka and explored methods to detect anomalous events in videos

Leadership Experience

Vice President and Co-Founder   João Pessoa, Brazil
TAIL - Technology and Artificial Intelligence League   *Aug. 2020 – Present*
- Coordinated more than 30 students working in different projects related to multiple AI areas, such as Computer Vision, Natural Language Processing, and Reinforcement Learning
- Conducted undergraduate students to work on ARIA Laboratory research projects involving Computer Vision and Natural Language Processing

Undergraduate Research Assistant   João Pessoa, Brazil
ARIA Laboratory - UFPB   *Apr. 2019 – Present*
- Researched on scientific initiation projects involving Natural Language Processing, Computer Vision, and Big Data
- Recruited undergraduate students to work on different research projects in partnership with other universities and companies
- Collaborated with senior students of the laboratory on their undergraduate thesis

Tools and Interests

Tools: Python, SQL (Postgres), C/C++, Julia, Javascript | Git, Docker, Amazon Web Services, VS Code | Pandas, NumPy, Matplotlib, Scikit-Learn, PyTorch, Tensorflow
Interests: Software Engineering, Deep Learning, Recommender systems, Reinforcement Learning, Natural Language Processing, Computer Vision