ALLAINCLAIR FLAUSINO DOS SANTOS

Software Engineer, Pythonist, Data Scientist

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Maringá, PR, Brazil

PROFESSIONAL EXPERIENCE

Software Engineer – remote – 2.9 years

Pinterest (through BairesDev outsourcing)

Aug 2019 – present Maringá, PR, Brazil

- We provide tools to improve Trust and Safety on Pinterest by developing systems that achieve product requirements.
- We also provided systems to improve observability on Ads systems by creating time-series dashboards for monitoring, alerting, and reporting.

Main technologies: Python/SQLAlchemy, JavaScript/React, Kibana, SQL, OpenTSDB, and Phabricator (Git).

Software Engineer – remote – 2.9 years

BairesDev

Aug 2019 – present Maringá, PR, Brazil

We do screening processes to recruit new employees, and we also helped some colleagues with mentorships.
Main technologies: Python

Assistant Professor – 7 months

State University of Maringá

Apr 2019 – Oct 2019 Maringá, PR, Brazil

I ministered the following subjects: Algorithms and Data Structures, Database, Multi and Hypermedia Systems, Algorithm Analysis, Graph Theory, and Object-Oriented Programming.
Main technologies: Python, C, MySQL, and Java.

Tech Lead & Data Scientist – 4 years

Seebot

Oct 2015 – Sept 2019 Maringá, PR, Brazil

We assembled an entire **smart traffic light (STL)** that can sense streets using cameras and act (open/close) autonomously. Our main achievements were:

- When I led software engineers, we created: STL hardware and software controllers, traffic simulators for traffic optimization, and dashboards.
- We created a traffic simulator using **SUMO**. Our main algorithm on this simulator had 200% to 400% waiting time optimization on light to medium vehicle traffic. We also deployed our STL in four real crossing roads.

Main technologies: Python/Gevent, SUMO, Linux/Shell Script/Systemd, R, Git, and Latex.

Data Scientist – remote – 10 months

Earlysec

June 2018 – Mar 2019 Maringá, PR, Brazil

We developed security systems to advise our clients on assurance issues. We used **Natural Language Processing (NLP)** techniques to filter, train, classify, and cluster social media messages. This way, we could alert our clients if something unusual was happening.
Main technologies: Python/Sklearn, Java, Git, Elasticsearch, Kakfa, Spark, and Linux.

SOME INTEREST AREAS

Algorithms · Python · Optimization · Data Science · Stats · Graph Theory · Monitoring & Alerting · R & D · Testing

EDUCATION

State University of Maringá

Master's degree in Computer Science

2014–2016 Maringá, PR, Brazil

Thesis: Algorithms based on Variable Neighborhood Search (VNS) meta-heuristic applied in the Bus Driver Schedule Problem.

Bachelor's degree in Computer Science

2010 – 2013 Maringá, PR, Brazil

Thesis: A genetic algorithm for the Feedback Arc Set Problem.

MAIN TECH SKILLS

- **Python** ●●●●●
- **JavaScript/React** ●●●○○
- **SQL** ●●●○○
- **Linux** ●●●○○
- **C/C++** ●●○○○

SCIENTIFIC PAPERS

Journal of Universal Computer Science

May 2017

Solving a Large Real-world Bus Driver Scheduling Problem with a Multi-assignment based Heuristic Algorithm.

(PTBR) XLVIII SBPO - Simpósio Brasileiro de Pesquisa Operacional

Sept 2016

Algoritmos baseados na meta-heurística VNS aplicados ao Problema de Escalonamento de Motoristas de Ônibus.

17th International Conference on Enterprise Information Systems (ICEIS-2015)

Jan 2015

Combining Heuristic and Utility Function for Fair Train Crew Rostering.