

# Software Engineer

Maringá, PR, Brazil +55 44 99719 1891

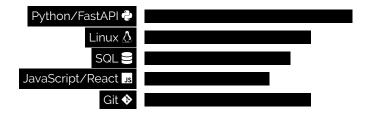
allainclair@gmail.com

allainclair github.com/allainclair allainclair.com

# WHO AM I?

I am a software engineer with 8 years of experience. Most of my experience is in back-end apps using Python-related technologies. I worked in small and big-sized companies designing, developing, and maintaining scalable services.

# **MAIN TECHS**



### **EXPERIENCE**

9/2022 - 5/2023 9 months - remote

#### **Backend** software engineer

Shipwell #

We are designing, creating, and maintaining a backend service to integrate load boards across North America.

Techs: Python/FastAPI / Pydantic / mypy / Pytest / SQLAlchemy / Postgres / RabbitMQ / Linux / Docker / AWS / Rollbar / Datadog / Redis / Terraform

8/2019 - 7/2022 2.9 years - remote

## **Software engineer**

- Trust and Safety Tools as Full-stack: we provided tools to keep Pinterest trusty and safe. We developed and maintained web tools to assist agents in fast-track trust and safety issues and fixing them.
- · Ads interface and Growth as Back-end: we provided systems to improve the observability of Ads systems by creating time-series dashboards for monitoring, alerting, and reporting.

Techs: Python/Flask / JavaScript/React / SQLAlchemy / Linux / SQL / Pandas / Jupyter / Kibana

8/2019 - 7/2022 2.9 years - extra

#### **Software engineer**

BairesDev #

We created screening processes for new employees, and we also helped some colleagues with mentorships. I interviewed about 340 candidates to be Python-focused software engineers. Techs: Python

4/2019 - 10/2019 7 months

### Assistant Professor

Maringá State University 🏛

I ministered the following subjects: · Algorithms and Data Structures · Relational Database · Multi and Hypermedia Systems · Algo-

rithm Analysis and Graph Theory · Object-Oriented Programming. Techs: Python / SQL / Java / C

10/2015 - 9/2019 4 vears

#### Tech lead & Data Scientist

Seebot #

- Tech Lead: 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 web dashboards.
- Data Scientist: We created a traffic simulator using SUMO (Simulation of Urban MObility). Our main algorithm on this simulator had 200% to 400% waiting time optimization on light to medium vehicle traffic. We also deployed our smart traffic light in four real crossing roads. To achieve this, we had to:
- Do researches in traffic optimization area by using smart traffic lights.
- Design and develop optimization algorithms for smart traffic lights.
- · Design and create embedded distributed real-time systems for the STL with a microservice architecture.

Techs: Python / Gevent / SUMO / R / Linux / Systemd

6/2018 - 03/2019 **B** Data Scientist 10 months

EarlySec #

We created security apps 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.

Techs: Python / Sckit-learn / Java / Elasticsearch / Apache Kafka / Spark / Linux

**EDUCATION** 

Thesis: Algorithms based on Variable Neighborhood Search (VNS) metaheuristic applied in the

Bus Driver Schedule Problem.

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

SCIENTIFC PAPERS

Solving a Large Real-world Bus Driver Scheduling Problem with a Multi-assignment based Heuris-

tic Algorithm.

9/2016 EI (PTBR) XLVIII SBPO - Simpósio Brasileiro de Pesquisa Operacional

Algoritmos baseados na meta-heurística VNS aplicados ao Problema de Escalonamento de Mo-

toristas de Ônibus.

1/2015 **III 17th International Conference on Enterprise Information Systems (ICEIS-2015)** 

Combining Heuristic and Utility Function for Fair Train Crew Rostering.

LANGUAGES HOBBIES NON PROFIT

English - Fluent Sports, Billiards, Beer/Brewing, I help people to learn and develop

**Portuguese** - Advanced Movies, Physics. in the TI area.