Allainclair Flausino dos Santos

Software Engineer

Maringá, PR, Brazil allainclair@email.com +55 44 99719 1891
linkedin.com/in/allainclair github.com/allainclair allainclair.com

ABOUT ME

I am a software engineer with 10 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 apps. I enjoy working with professional people where I can support and be supported depending our duties.

PROFESSIONAL EXPERIENCE (10 YRS.)

Backend software engineer 01/2025 – current (less than 1 yr.)
Telnyx – Chicago, IL, United States, Remote
I have been developing backend web APIs for SMS messaging management.
Techs: Python, FastAPI, Pydantic, Docker, PostgreSQL, pytest, Grafana

Software engineer – Full stack 04/2023 – 07/2024 (1 yr. 5 mos.)
The New England Center for Children – Southborough, MA, United States, Remote
We designed, created, and maintained education-tech app products. I have been working using Python, FastAPI, Quart, JavaScript for micro-services with MySQL to manage data.
Techs: Python, FastAPI, Quart, Pydantic, Docker, pytest, MySQL, JavaScript, Java

Software engineer – part time 03/2024 – 07/2024 (4 mos.)
Martian – San Francisco, CA, United States, Remote
The main Martian feature is an LLM router: a user can send a prompt, and the Martian's model will decide on the best LLM for it.
• I contributed to Martian's adapters (github.com/withmartian/adapters). It interfaces with a large set of open and proprietary Large Language Models (LLMs).
• I developed a Sales Dashboard (front and backend) to give the Sales Team insights into our customers. This dashboard used HTMX/Jinja for frontend and Litestar, Pydantic, MongoDB for the backend.
Techs: Python, FastAPI, Litestar, Pydantic, MongoDB, Docker

Backend software engineer 09/2022 – 07/2023 (11 mos.)
Shipwell – Austin, TX, United States, Remote
We designed, created, and maintained backend services integrating load boards across North America.
Techs: Python, FastAPI, Django Pydantic, SQLAlchemy, pytest, PostgreSQL, RabbitMQ, Rollbar, Datadog, Redis, Docker, AWS

Software engineer 08/2019 – 07/2022 (2 yrs. 11 mos.)
Pinterest – San Francisco, CA, United States, Remote
• **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.

We created screening processes for new employees and helped some colleagues with mentorships.

I interviewed about 340 candidates to be Python-focused software engineers.

Techs: `Python`, `SQLAlchemy`, `Flask`, `JavaScript`, `React`, `MySQL`, `Jupyter`, `Kibana`

Assistant Professor 04/2019 – 10/2019 (11 mos.)

Maringá State University – Maringá, PR, Brazil

I ministered the following subjects:

• Algorithms and Data Structures • Relational Database • Multi and Hypermedia Systems • Algorithm Analysis and Graph Theory • Object-Oriented Programming.

Techs: `Python`, `MySQL`, `Java`, `C`

Tech Lead & Data Scientist 10/2015 – 09/2019 (4 yrs.)

Seebot – Maringá, PR, Brazil

• **Tech Lead**: We assembled an entire smart traffic light (STL) that can sense streets using cameras and act (open/close) autonomously. My main achievements were: when I led software engineers, we created a 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 4 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`,

Data Scientist 06/2018 – 03/2019 (10 mos.)

EarlySec – Maringá, PR, Brazil, Remote

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` `C`

EDUCATION

Master's degree in Computer Science 2014 – 2016

Maringá State University – Info Department, Maringá, PR, Brazil

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

Bachelor's degree in Computer Science 2010 – 2013

Maringá State University – Info Department, Maringá, PR, Brazil

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

MY PROJECTS

tt.allainclair.com

Website that aggregates tech influencers from Brazil.

Techs: `FastHTML`, `dasyUI`

akingressos.com.br

I have created and maintained this "Event" website for the city of Maringá, PR, Brazil. It updates every 15 minutes with events in the city like music shows and others.

Techs: `FastHTML`, `MonsterUI`

SCIENTIFIC PAPERS

Journal of Universal Computer Science 05/2017

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

(PT-BR) XLVIII SBPO - Simpósio Brasileiro de Pesquisa Operacional 09/2016

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

17th Intl. Conference on Enterprise Information Systems (ICEIS-2015) 01/2015

Combining Heuristic and Utility Function for Fair Train Crew Rostering.