

# Marc Giannuzzi, Software Engineer

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LINKS

 $\frac{\text{GitHub}}{\text{Linkedin}}$ 

#### EXPERIENCE

January 2023 — present

### Engie [Visian] — Data Consultant

Paris, FR

Context: Engie is the leading supplier of natural gas and green electricity, as well as the third largest global group in the energy sector.

**Data Engineer** part of the agile team (5 people) developing the products Mon Bonus Engie / Ecodefi+, ICE (Impact Carbone Elec) and Dynamic Eco-gestures evolving in the SAFe framework

- Ecodefi+ (Mon Bonus Engie) is a free service offering individuals rewards for their energy sobriety during challenges (300k clients)
- ICE (Impact Carbone Elec) allows clients to analyze future carbon consumption peaks and adapt their consumption accordingly (1M clients).
- Dynamic Eco-gestures helps explain the impacts of electrical objects in households (1M clients)

#### Missions

- Implementation and development of products
- Large-scale data management (databases, flow orchestration...)
- Development of technical and functional KPIs
- Monitoring and Alerting of solutions
- Creation of REST APIs (100k calls/day), latency < 1sec
- Scaling of Deep Learning algorithms (DeepAR, Temporal Fusion Transformer...)
- Participation in AWS microservices architecture and digital platforms
- Optimizations (memory, execution time, refactoring...)
- Database flow optimizations (structure, index...)
- Automated reporting via SNS
- Gitlab CICD
- Writing roadmaps as part of the migration of a central technology used for several years within the SAFe train
- Participation in technical-functional architectures

Skills: c3ai · JavaScript · Jenkins · AWS Lambda · Amazon Kinesis · Databricks · Elastic Stack (ELK) · Python (programming language) · AWS S3 · Terraform · Amazon CloudWatch · Splunk · MLflow · Amazon DynamoDB · TIDB · Apache Airflow · Amazon Simple Queue Service (SQS) · Amazon Simple Notification Service (SNS)

January 2023 — present

### Visian — Machine Learning Engineer

La Défense, FR

 ${\it Context:} \ \underline{\hbox{Visian}} \ \hbox{is a {\bf consulting}} \ \hbox{company specializing in large-scale data projects. My video presentation:} \ \underline{\hbox{Youtube}}$ 

- Recruitment of technical profiles (Data Engineers, Data Scientists, Devops, Fullstack)
- Leadership of the Pysquad project, developing digital projects internally
- Coordination of the generic implementation of a **generative Artificial Intelligence** (AI) project for various inference tasks (textual, vision, multimodal etc...) using Azure ML/DL services and Azure AI Studio
- Creation of a data platform to help sales retrieve data on missions, prospects, clients, consultants etc.

Skills: Docker · Azure AI Studio · Django · Streamlit · Power<br/>BI · FastAPI · Elastic Stack (ELK) · AWS RDS · Redis · AWS Code Artifacts

Context: <u>Aqua Digital Rising</u> is a **fintech startup** that aims to revolutionize sports betting by analyzing all player and team statistics.

#### Data management

- Management of storage (creation, structuring, cleaning) of several databases (MongoDB, SQL server, HDF5) from data retrieved by Sport Radar and Opta providers
- Structuring of data flows in Python through the different components of the architecture and
  optimization of reading speed thanks to SQL Server indexes (several hundred GB)
- Creation of a highly configurable REST API allowing the front-end team to retrieve database aggregations and other static information
- · Temporary backups of API query results using Redis
- Real-time updates of statistical data using RabbitMq
- Analyses and data visualization
- Machine learning algorithms (clustering) and visualizations for analyzing player and team statistics

#### Other missions

- Configuration of various Azure services (Azure Functions, Azure Web Services, Azure Artifacts, Azure Pipelines, Azure Keyvault) in line with the company's Cloud strategy
- Quantitative analyses of cryptocurrencies with InfluxDb to inform investment strategy
- Coordination of 2 engineers (a data scientist and a front-end developer)

Skills: Microsoft SQL Server · Scikit-learn · Redis · JIRA · RabbitMQ · Databases · InfluxDB · Bash · MongoDB · Microsoft Azure

#### February 2021 — July 2021

### Orange Business Services — Data Scientist

Paris, FR

Context: Orange Business Services is a consulting company in digital transformation for communication projects.

- Analyses and diagnostics of VoIP network anomalies, particularly with machine learning (clustering)
- Creation of a dynamic VoIP network graph with Kibana then Neo4J for easier visualization, integrated into a web page
- Analyses of Devops metrics (CPU usage, storage...) of an Elastic server cluster
- Automation of Elastic log deletion with log4j

Note: VoIP = Voice over Internet Protocol is a network that allows phone calls via the Internet  $Skills: HTML \cdot Scikit-learn \cdot Elastic Stack (ELK) \cdot Cascading Style Sheets (CSS) \cdot Python (programming language) \cdot Neo4j \cdot JavaScript \cdot Databases \cdot Bash$ 

### August 2020 — March 2021

### Digiberries — Software Engineer

Paris, FR

Context: Digiberries is a web referencing agency, improving clients' SEO strategies.

- Development of a script allowing automation of Excel report creation from Google Ads data
- Creation of an SEO analysis tool and automated PDF report creation with Lighthouse and NodeJS packages
- Email sending automation

Skills: Lighthouse · Python (programming language) · Google Ads · Node.js

### April 2020 — August 2020

# Eudonet CRM — Data Scientist

Courbevoie, FR

 ${\it Context:} \ \underline{{\rm Eudonet}} \ \mathbf{develops} \ \mathbf{CRM} \ \mathbf{software} \ \mathrm{in} \ \mathrm{a} \ \mathrm{B2B} \ \mathrm{context.}$ 

- Implementation of the Elastic suite (ElasticSearch, Kibana, Logstash + Filebeat) for analyzing Windows IIS log files
- Creation of a monitoring tool with dynamic dashboards in Kibana
- Creation of a Python algorithm for detecting decrease in CRM usage by clients. Use of the FBProphet library
- Creation of a dynamic web platform (Javascript, Node.js) allowing visualization of the results of the previous algorithm
- PowerBI visualizations for internal management of employee projects
- Creation of powershell scripts for managing IIS applications
- $\bullet~$  SQL queries for creating reports on client usage and modifying parameters
- Weekly agile sprints

Skills: Microsoft SQL Server · HTML · Windows PowerShell · Elastic Stack (ELK) · Cascading Style Sheets (CSS) · Python (programming language) · Microsoft Power BI · JavaScript · Databases · Bash

 $\mathrm{July}\ 2019 - \mathrm{Sept.}\ 2019$ 

## Veesion — Software Engineer

Paris

Veesion is a French scale-up aiming to automatically detect thefts in supermarkets.

- Creation of an internal platform allowing real-time visualization and labeling (to improve the company's theft detection algorithm) of videos with Django
- Classification of data allowing the learning of the computer vision model Veesion is a French scale-up aiming to automatically detect thefts in supermarkets.
- Creation of an internal platform allowing real-time visualization and labeling (to improve the company's theft detection algorithm) of videos with Django
- $\bullet\,$  Classification of data allowing the learning of the computer vision model

Skills: HTML · Cascading Style Sheets (CSS) · Python (programming language) · JavaScript · Amazon S3 · Django

2024 Artificial Intelligence

Automated creation of multimodal digital content

2024 Finance

Algorithms and visualizations to aid financial analysis (Python)

2021 Sorting Algorithms

Platform for visualizing sorting algorithms (React)

2021 Web Semantics

Website displaying the availability of bikes/trains (RDF)

2020 NLP (Natural Language Processing)

Conversational agent displaying song lyrics (Chatbot Messenger)

2020 Computer vision

Computer vision algorithm transforming finger gestures into equations via a webcam (Tensorflow,

OpenCV)

2019 Deep Learning

Algorithm for health scoring of cooking recipes (Tensorflow)

### EDUCATION

Sept. 2018 — June 2021 ESILV (École Supérieure d'Ingénieurs Léonard De Vinci)

Courbevoie, FR

- Master's in Computer Science, Big Data, and IoT
- Specialization in Data Science

Sept. 2019 — Jan 2020 UCR (University Of California Riverside)

Riverside, California USA

- CS 235 Data Mining Techniques
- <u>CS 171</u> Introduction to Machine Learning and Data Mining
- CS 009 Python programming

Sept. 2016 — Dec. 2018 CPGE Fénelon Sainte-Marie

Paris, FR

- MPSI
- MP

LANGUAGES English: Fluent Français: Native