# Lucas França

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## **SUMMARY**

Accomplished Senior Software Developer with more than 5 years of expertise in Back-end technologies and high scalable environments using Microservices Architecture and Patterns. Demonstrated success in architecting, designing, developing and delivering impactful solutions across various sectors, driving business growth and competitive advantage.

Known for a meticulous approach, innovative problem-solving, and strong ownership in delivering high-quality, reliable software. Proven leader with experience in mentoring and managing development teams through the full Software Development Life Cycle (SDLC).

Seeking a Senior Back-end Engineer position to leverage my technical acumen and leadership skills in contributing to cutting-edge projects and fostering a collaborative team environment.

#### **TECHNICAL SKILLS**

- Programming Languages: Python, Go (Golang), Javascript, SQL and Shell script.
- Libraries:
  - Python: FastAPI, Django, Django Rest Framework, Flask, SQLAlchemy, Pydantic, Marshmallow, Pandas, Numpy, Pytest, Pipenv, Poetry, Conda, AsynclO, Alembic, Boto3, FastStream, gRPC IO, Gunicorn, Uvicorn, Hypercorn, Locust.
  - o Go: Gin Gonic, Fiber, Echo, GORM, Gocolly, Testify, gRPC Protobuf (Buf), AWS SDK.
  - Javascript (Node.js runtime): Express, NestJS, ReactJS, VueJS, NextJS, React Native, Jest, Mocha, Sequelize, Mongoose, Npm, Yarn.
- Databases:
  - o **SQL**: PostgreSQL, MySQL, AWS RDS Aurora.
  - NoSQL: DynamoDB, ElasticSearch, Redis.
  - Caching: Redis, Memcached.
- Messaging Brokers: AWS SQS, RabbitMQ, Redis.
- Cloud Computing: Amazon Web Services, Google Cloud, Magalu Cloud, OpenStack.
- Monitoring Tools: Open Telemetry, Grafana Loki, Grafana Tempo, Kibana, Logstash, Prometheus, Dynatrace, Sentry, Splunk, SigNoz.
- Containerization and Virtualization: Docker, Compose, Swarm, Kubernetes, LxD, Incus.
- DevOps and Cl&CD: Terraform, Helm Chart, ArgoCD, Rancher, Jenkins, Github Actions, GitLabCl, Bitbucket Pipelines.
- Auth and Security: Cloudflare, Hashicorp Vault, OpenBao, KMS, JWT, OAuth2, Kong.

## **SOFT SKILLS**

- Leadership: Proven track record of leading and managing development teams, including mentoring
  developers and orchestrating cross-team collaborations to achieve project goals and drive significant
  business outcomes. Experienced in providing guidance and support to team members, helping to
  enhance their technical skills and foster a collaborative work environment.
- Communication and Collaboration: Exceptional ability to communicate complex technical concepts to
  diverse stakeholders. Proven track record of enhancing project alignment and efficiency through effective
  cross-team discussions and collaboration.
- **Problem-solving**: Skilled at diagnosing and resolving intricate technical challenges under tight deadlines. Notable for innovative solutions and impactful contributions to complex projects.
- Fast-learning: Quickly adapts to new technologies and methodologies. Proven ability to integrate into
  various tech stacks and projects rapidly, demonstrating versatility and a commitment to continuous
  learning.

## **WORK EXPERIENCE**

# Senior Software Developer, PDMFC - Lisbon, Portugal (Remote) – (April/2022 – Now)

I have been working as Senior Back-end Developer at DGAE (*Directorate General of School Administration is a government entity responsible for administrating everything about basic education in the country*) rewriting their legacy system from scratch.

I have been Architecting, Designing and Developing new features for the Back-end, writing (Unit and Integration) Tests, Code Reviewing, Leading and Mentoring a team with 1 Trainee Developer, 3 Junior Developers and 1 Mid Level Developer, also acting as a cross-team facilitator between the Back-end, Front-end, QA and Infrastructure teams.

I have worked with Python (using FastAPI, SQLAlchemy, Alembic, Pydantic, AsyncIO, Pytest, Poetry, Uvicorn, Hypercorn), PostgreSQL as Database, Redis for Cache, Open Telemetry (with Grafana Loki for logging, Grafana Tempo for tracing and Prometheus for metrics), Docker Containers and Shell Script for automation, Linux Server, RESTful APIs, Gitlab and GitlabCI for CI&CD.

In this project one of my great contributions was implementing the Clean Architecture (*An architectural design on Software Development*) which resulted in more code quality, low coupling, allowing to change technologies on the project with low cost and less effort avoiding damages in the Business Logic. Also, I have helped to redesign the core architecture proposing solutions focused on scalability, reliability, maintenance and performance.

I worked as a Senior Back-end Developer at Emb3rs Project (*This project has received funding from the European Union's Horizon 2020 research and innovation programme, the principal aim of this project is reuse Heat and Cold reducing CO<sub>2</sub> emission) with Python (using gRPC IO, Protobuf, SQLAlchemy, Pandas, Numpy, Pydantic, Pytest, Conda), PostgreSQL, Redis, Docker Containers and Shell Script for automation, Linux Server, Nginx, gRPC Protocol and Github Actions for CI&CD. I wrote (Unit and Integration), automated the Deployment Process and improved the codebase while I was delivering important features and orchestrating integrations with modules developed by PhD's from different universities of Europe.* 

I made great contributions, such as delivering an important implementation on a short deadline that ensured the project extension, also finding and creating solutions for complex problems in the simulation models.

# Senior Software Developer, Magalu Cloud - Brazil (Remote) - (December/2023 - June/2024)

I worked as a Senior Back-end Developer at LBaaS Team (Load Balancing as a Service, one of the products that will be offered as a service by Magalu Cloud, a public cloud provider part of Magazine Luiza a big Brazilian company in the multichannel retail sector) helping them to set up their first Load Balancer product version.

I worked Architecting, Designing and Developing, writing (Unit, Integration and Load) Tests, setting up DevOps/GitOps stuff, Code Reviewing, participating in Integrations and discussions with other teams on discovering process and Solution Design, Interviewing candidates and Leading.

For 1 month I was part of the Networking Team which I could contribute with a solution that reduced unnecessary resources usage. Also I could help the SRE Team with an important improvement on the Open Telemetry solution design that reduced the concurrency on the back-end services and library usage.

I worked with Python (using FastAPI, SQLAlchemy, Pydantic, Pytest, Poetry, AsyncIO, gRPC IO, FastStream, Hypercorn, Uvicorn), PostgreSQL, RabbitMQ, OpenStack, Google Cloud (VMs, Networking, Firewall Rules), Hashicorp Vault, Terraform, Kubernetes, ArgoCD, Monitoring Tools (Open Telemetry for tracing, Elasticsearch for logs, Prometheus for metrics, Sentry as redundant APM), GitOps, Helm Chart, Gitlab and GitlabCI.

# Technical Leader & Senior Software Developer, <u>Serasa Experian</u> - Brazil (Remote) – (April/2021 –May/2022)

I worked at iPaaS Team (Integration Platform as a Service, is a product that the principal aim is to provide an API to the partners integrate with Limpa Nome Online) as a Technical Leader managing, leading and supporting a team with 2 Junior Developers, 1 Mid-level Developer and 1 QA Engineer. Also I worked developing and maintaining the iPaaS services cluster in a fast-paced and high scalability Event Driven environment.

In this project I contributed to designing and promoting the future of the iPaaS product, documenting and securing the public API used by the partners, and implementing the first service using the Clean Architecture design. I made a great contribution leading, supporting and monitoring +30 new integrations from our partners in 3 months that helped to increase the product revenue and attract more visibility inside the company.

I worked as a Back-end Software Developer at LNO Integrations Team (Limpa Nome Online, is a product created to help people pay off their overdue debts) developing, monitoring and maintaining REST and SOAP API integrations.

In this project I contributed by improving integrations, adding Unit Tests, solving complex issues and helping my co-workers to overcome their challenges. I made a great contribution developing an integration of 2 months in 2 weeks. I got good feedback from the partner with whom I created a good relationship, and could help the company to earn +1 Million BRL in less than a month with this important release. This success case resulted in a salary increase with just 6 months as an employee.

Also, I could work as Back-end Software Developer Cross Teams, contributing with development and maintenance of microservices owned by Platform, Payments, LNO and iPaaS Teams.

I worked with Go/Golang (using Go Templates, Gin Gonic, Gorm, Testify, AWS SDK), Python (using FastAPI, Flask, SQLAlchemy, Alembic, Marshmallow, Pydantic, Zeep, Cryptography, Multiprocessing, Pytest, Pipenv, Poetry), Amazon Web Services (RDS Aurora, SQS, SNS, S3, KMS, ElastiCache, Kinesis Stream, API Gateway), PostgreSQL, Redis, ElasticSearch, Docker, Kubernetes, JFrog, Rancher and Jenkins. I wrote Unit Tests using Testify for Go, and for Python I used UnitTest and Pytest. I used Celery, AWS SQS and SNS for messaging. I monitored the services using Kibana, Logstash, Grafana, Dynatrace, Splunk and AWS Kinesis in an Event Driven architecture.

# • Software Developer, Tinnova - Brazil (Remote) - (March/2020 - April/2021)

Software development with Python (Django, DRF, Selenium, Pandas, AsyncIO, Pytest), AWS (EC2, RDS, Lambda Function, SES, S3 Bucket, API Gateway), Javascript (JQuery, Bootstrap), Celery, Docker, Shell Script, Nginx, Cloudflare, PostgreSQL, Redis, DynamoDB, Pagarme API, Serverless Framework, React and NodeJS. Application deployment in EC2 Instances and S3 Bucket for static applications. Development environment automation with Docker. CI&CD with Bitbucket Pipelines using branch strategy deployment.

I was responsible for application infrastructure management reducing the expensive cost with unnecessary resources. I also launched 2 products in 3 months working alone.

Back-end software development in microservices with Python (Serverless Framework for AWS Lambda Functions), DynamoDB, S3 Bucket for storage and AWS SES. Maintenance and deployment Angular Front-end application. CI&CD with Bitbucket Pipelines using branching strategy.

Full Stack Software development with Python (Django), NodeJS (Express), React (MaterialUI), AWS (Lambda Function, SES, S3 Bucket), DynamoDB, Redshift, Serverless Framework, VueJS (Quasar), Firebase, Firestore, JQuery, HTML and CSS. Task Queues with Celery. Development environment automation with Docker.

I was responsible for upgrading the project from Python 2.7 to 3.6 and Django from 1.11 to 3.0.

Freelance Software Developer, <u>CargoBR</u> - Brazil (Remote) – (2020)

Back-end Software development of a carrier platform that works delivering packages in the whole country with Python (Django, Django Rest Framework, Pytest), AWS (EC2, SES, S3 Bucket), Docker, PostgreSQL, MySQL. Unit tests programming with UnitTest and Pytest. Task Queues with Celery. Cloud Computing with Amazon Web Services. Development environment automation with Docker.

Freelance Software Developer, <u>Social Comics Entretenimento</u> - Brazil (Remote) – (2020)

Back-end software development of a Comic Books platform with Typescript, Node.js (Express), AWS (Lambda Functions, S3 Bucket, DynamoDB), Docker. Unit tests programming with Jest. Cloud Computing with Amazon Web Services. Development environment automation with Docker.

• Software Developer, JetSoft - São José dos Campos - SP, Brazil (On-site) - (June/2019 - March/2020)

Full Stack Software development with Genexus (Low-code software), Python, Javascript, SQL Server and PostgreSQL. Modeling and normalizing databases. I had experience with Google API (Geolocation), IBM AI + Twilio Whatsapp API (Chatbot).

I worked on 3 different official projects after 3 months of studies and I developed some proof of concepts like a Wiki for internal knowledge storage and Chatbot with Whatsapp integration.

## **EDUCATION**

- (Expected 2028) PUC Minas Bachelor of Science in Computer Information Systems
- (2019 2020) <u>Fatec São José dos Campos</u> Technology (AS) in Computer Systems Analysis

## **LANGUAGES**

Portuguese: Native

• English: Intermediate (B2)