

# Matheus Lúcio Carvalho da Costa

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## SUMMARY

Experienced Software Engineer with 10+ years of experience in software development and programming. Highly skilled in Node.JS, React.JS, Java, PHP, and Python. Proven track record of delivering successful projects on time and under budget. Seeking an opportunity to utilize my skills and experience to contribute to the success of a software engineering team.

## EXPERIENCE

### Senior Software Engineer | Stefanini Group | Brasília, Brazil | May 2020 - Present

- **Lead** a team of 8 developers in the design and implementation of scalable microservices and data integration pipelines for enterprise systems in the financial sector.
- **Spearheaded** the migration of COBOL-based account balance operations (executed over 500 million times/day) from mainframe to containerized Java services, significantly reducing infrastructure costs and dependency on legacy systems.
- **Engineered** a predictive analytics solution powered by AI to classify and organize new data lake tables based on schema structure, improving data discoverability and reducing manual data curation.
- **Designed** and deployed resilient cloud-native services using Docker, Kubernetes, Helm Charts, ArgoCD, Jenkins, Grafana, and Prometheus for robust observability and automation.
- **Collaborated** with cross-functional teams to define project architecture using Java, Node.js, Python, React.js, and TypeScript, delivering maintainable and high-performance systems.

### Software Engineer (Part-time) | BairesDev | New York, NY, USA (Remote) | December 2022 - May 2023

- **Engineered** a DevOps platform to support global development operations for ObvioHealth, streamlining deployment processes and improving developer experience across more than 10 teams.
- **Spearheaded** the creation of scalable RESTful APIs using Node.js and React.js, enabling seamless CI/CD integration and accelerating feature rollout.
- **Reduced** deployment time by 30% through the strategic use of Docker, Kubernetes, and ArgoCD for container orchestration and automated pipelines.
- **Designed** and maintained robust MySQL-backed systems to support continuous delivery and application stability across environments.

### Web3 Software Engineer (Freelancer) | SPACE Metaverse | Vancouver, BC, Canada (Remote) | August 2022 - November 2022

- **Developed** and maintained reusable Web3-enabled frontend components using React.js and Next.js, powering immersive virtual storefronts for phygital (physical + digital) product experiences.
- **Integrated** Moralis.io and MetaMask API to authenticate users and enable seamless NFT minting, linking digital assets to both crypto wallets and in-game identities.
- **Solved** complex challenges in synchronizing NFT ownership across metaverse environments, allowing users to utilize purchased items (e.g., virtual Nike shoes) in both marketplace and gaming contexts.
- **Contributed** to decentralized infrastructure by deploying services on AWS (LightSail, EC2, Lambda, S3, RDS) and integrating Cognito for secure user management.

### Web3 Software Engineer (Freelancer) | SNACKCLUB | Los Angeles, CA, USA (Remote) | February 2022 - August 2022

- **Led** a team of 6 developers in the creation of a crypto-to-fiat exchange platform and an internal accounting system for tracking crypto transactions and profitability.
- **Engineered** backend services using Node.js, TypeScript, and RabbitMQ, integrating blockchain data to provide real-time tracking of cryptocurrency purchases, sales, and ROI in fiat currency.
- **Developed** frontend interfaces using Next.js and React.js to enable seamless user interaction with wallet balances and transaction histories.
- **Spearheaded** the launch of one of the first platforms in Brazil to support PIX-to-crypto transfers, bridging traditional finance and blockchain ecosystems.
- **Ensured** security and transparency of crypto financial operations through smart architecture decisions and Web3 integrations.

### Software Engineer (Freelancer) | Maitha Tech | São Paulo, Brazil (Remote) | July 2021 - February 2022

- **Engineered** a credit evaluation pipeline combining customer purchase history, proprietary scoring, and Neurotech's AI to automate B2B lending decisions.
- **Processed** high-volume client data streams with Node.js, Python, and RabbitMQ, generating real-time credit recommendations for creditors.
- **Leveraged** frontend interfaces in React.js and TypeScript that displayed real-time credit risk for 100+ B2B clients, improving decision-making speed by 40%.
- **Optimized** backend microservices for scalability and resilience, ensuring sub-second response times for credit checks.

### Senior Software Engineer | Cast Group | Brasília, Brazil | July 2019 - May 2020

- **Developed** internal tooling within a Developer Experience (DX) team to streamline workflows for 100+ engineers at Bank of Brazil.
- **Created** project scaffolding templates in Node.js and TypeScript, reducing setup time for new services by up to 80%.
- **Engineered** reusable libraries and standardized design patterns across Java, Python, and Node.js stacks to minimize duplicated code and increase consistency.
- **Automated** common development tasks—such as CI/CD pipeline setup, logging, and monitoring integration—saving dev teams an average of 2 hours per project.
- **Maintained** and enhanced observability using Elasticsearch, Fluentd, and Kibana (EFK stack), improving incident traceability by 35%.
- **Deployed** and managed containerized tools via Docker, Kubernetes, and Argo CD, integrated with GitLab, JFrog, Rancher, Prometheus, and Grafana.

### Software Engineer | Montreal Viagens | Brasília, Brazil | April 2018 - June 2019

- **Led** a team of 4 developers in modernizing a legacy monolithic system by integrating RESTful APIs using Java (JAX-RS) and React, improving system interoperability.
- **Migrated** core services and APIs from on-premises infrastructure to AWS (EC2, S3), increasing service availability and scalability while reducing downtime by over 40%.
- **Architected** and implemented a mobile reservation app using React Native, enabling customers to book accommodations directly from smartphones for the first time.
- **Refactored** legacy Java Wicket components into modular Spring services, improving development velocity and code maintainability.

- **Integrated** third-party travel services (flights, hotels) with internal systems via REST and SOAP (JAX-WS) APIs, expanding product offerings and automating operations.

### Software Engineer | SGS Unigeo | Goiania, Brazil | October 2017 - April 2018

- Developed and maintained a cross-platform mobile app using Axway Appcelerator (Alloy/Titanium), used by over **200 field technicians** to collect and log IoT sensor data across rural farming zones.
- Engineered offline-first data sync architecture between mobile SQLite and central PostgreSQL databases, reducing manual data entry by **80%** and enabling reliable syncing even with **<30% connectivity coverage**.
- Built backend microservices in Java (Spring) to process and correlate data from **100K+ sensor events per day**, satellite imagery, and rainfall meters for centralized analytics.
- Delivered AngularJS-based dashboards that supported **real-time data visualization** for more than **50 farm managers**, enhancing operational decisions and resource planning.
- Integrated geospatial satellite imagery with on-ground sensor data, generating automated reports that improved crop monitoring efficiency by **25%**, contributing to higher yield predictability.

### Software Engineer | Engesoftware Tecnologia S.A | Brasilia, Brazil | October 2015 - October 2017

- Integrated customer and public portals for Montreal Viagens, enabling real-time access to **1000+ travel and hotel products**, increasing customer engagement by **30%**.
- Developed and maintained web modules using PHP, MySQL, and .NET to support travel booking flows, reducing manual reservation tasks by **40%**.
- Consumed and integrated WSDL/SOAP WebServices for flight and hotel availability, ensuring accurate listings across multiple platforms with **99.9% uptime**.
- Built and deployed over **20+ landing pages** for marketing campaigns, improving lead generation by **15%** month-over-month.
- Enhanced portal UI/UX using jQuery and Bootstrap, contributing to a **25% decrease in user drop-off rate** on key conversion pages.

### PHP Developer | Cast Group | Brasilia, Brazil | September 2014 - October 2015

- Developed and maintained critical web portals for **Brazilian government projects** in Education and Foreign Affairs, supporting services accessed by **millions of citizens and embassy officials worldwide**.
- Contributed to the INEP/ENEM platform used by over **3 million students annually** to manage national university entrance exams, improving system stability and accessibility.
- Engineered and optimized internal messaging systems that distributed diplomatic telegrams to **100+ embassies**, enhancing Brazil's global communication infrastructure.
- Utilized PHP, Zend Framework 2, and Doctrine 2 to build scalable backend systems; improved code maintainability through design patterns and efficient database queries.
- Collaborated in agile teams using Scrum, Git, and SVN to deliver updates on a bi-weekly cycle, helping meet strict government deadlines with **100% on-time delivery**.

### Intern PHP Developer | Ministry of Defense (Brazil) | Brasilia, Brazil | April 2014 - November 2014

- Supported the development of internal systems for **logistics and personnel management** across Brazil's Armed Forces (Army, Navy, and Air Force).
- Contributed to a mission-tracking system that monitored **over 1,000 military agents deployed globally**, enhancing transparency and coordination of international operations.
- Assisted in maintaining the Ministry's official vehicle control platform, streamlining the management of **hundreds of fleet assets** across multiple military branches.
- Gained hands-on experience with legacy technologies such as **Delphi 5 and SYBASE**, while also building web modules using **PHP and ScriptCase**.
- Wrote and optimized Oracle SQL queries to improve system performance and data integrity across multi-branch applications.

### PHP and Zend Developer | 954 Group | Brasilia, Brazil | November 2013 - July 2014

- Developed post-sale customer tracking tools for **Chevrolet (GM)**, managing over **10,000+ customer records**, resulting in a **15% improvement in client retention metrics** across serviced dealerships.
- Built and maintained PHP applications using **Zend Framework**, reducing bug turnaround time by **30%** through clean, modular code and adherence to MVC practices.
- Assisted in implementing a lead generation system that captured and routed **500+ resale inquiries monthly**, contributing to a **10–12% increase** in vehicle resale opportunities.
- Streamlined internal workflow by integrating **MySQL Workbench** and **Sublime Text**, increasing code deployment speed by **20%**.
- Contributed within a small agile team, helping deliver **weekly sprint goals on time** in over **90% of cycles**, while gaining hands-on experience with **LINUX-based server environments**.

## EDUCATION

### Master in Digital Marketing and Big Data | Universidad Europea Del Atlántico | Minor in Software Engineering

Santander, Cantabria, Spain | 2024

### Postgraduate Software Engineering And Architecture | Universidade Cândido Mendes (UCAM)

Rio De Janeiro, Brazil | 2019

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### Bachelor of Science in Systems of Information | Universidade Paulista (UNIP)

Brasília, DF, Brazil | 2016

- Honorable Mention 10

## CERTIFICATIONS

### GitLab Certified Git Associate | GitLab | 2022

- Individuals who earn GitLab Git Certified Associate certification are able to explain what GitLab is and why teams use it, perform basic Git commands for branching, merging, and remote work, and apply fundamental concepts and skills using GitLab within the DevOps lifecycle.

### Oracle Cloud Infrastructure Foundations 2021 Associate | Oracle | 2022

- The Oracle Cloud Infrastructure (OCI) Foundations certification is intended for individuals looking to demonstrate fundamental knowledge of public cloud services provided by Oracle Cloud Infrastructure. This certification is targeted towards candidates with non-technical backgrounds such as those involved in selling or procuring cloud solutions, as well as those with a technical background who want to validate their foundational-level knowledge around core OCI services. This exam does not require any hands-on technical experience and is not a prerequisite for taking any other OCI certifications.

### Scrum Fundamentals Certified (SFC™) | SCRUMstudy | 2021

- Scrum Fundamentals Certified course is tailored to help anyone interested to know more about Scrum; learn about key concepts in Scrum as defined in the SBOK® Guide; and to get a basic understanding of how Scrum framework works in delivering successful projects.

## SKILLS

Java, Node.JS, Python, React JS, TypeScript, Moralis.io, Metamask API, AWS (LightSail, Cognito, RDS, S3, EC2, Lambda), Web3, Next.JS, RabbitMQ, Blockchain, HTML5, CSS3, AJAX, Git, GitHub, SVN, Docker, Kubernetes, ArgoCD, Rancher, Oracle, SQL Server, MongoDB, MySQL, PostgreSQL, Fluentd, Kibana, Prometheus, Grafana, Spring, Wicket, Jax-RS, Jax-WS, Angular, Electron, React Native, PHP, Zend Framework 2, Doctrine 2, UML, jQuery, Scrum, Smarty, Joomla, MySQL Workbench, Delphi 5, SYBASE, ScriptCase, Eclipse, Sublime, LINUX, LightSail, Cognito, RDS, S3, EC2, Lambda, Microsoft Exchange, Axway Appcelerator, Alloy, Titanium, SQLite, Amazon EC2, Amazon S3, WebServices WSDL, SOAP, Drupal, Bootstrap, Symfony, PHPUnit, Moralis.io, Metamask API, Elasticsearch.