

● Available for Opportunities

# Matheus Schumacher

Full-Stack & AI Engineer · Systems Architect

Email

WhatsApp

GitHub

LinkedIn

Portfolio



## About Me

Full-Stack and AI Engineer with **8+ years of hands-on experience** delivering production-grade systems across web platforms, AI automation, and embedded systems. Proven track record in designing scalable architectures, building **AI agents with LLM integration**, and developing ML pipelines for real-world applications. Specialized in **system-level optimization, AGI research pathways, and AI-powered automation**. Deep expertise in cloud infrastructure (AWS, GCP, Azure), DevOps workflows, and hardware-software integration from electronics background.



## Core Competencies



AI Agent Architecture



Full-Stack Development



### LLM Integration

GPT, Claude, Gemini APIs, Fine-tuning, Ollama



### System Architecture

Performance Optimization, Low-level to High-level



### ML/DL Pipelines

TensorFlow, PyTorch, Computer Vision, NLP



### Cloud & DevOps

Docker, Kubernetes, AWS, GCP, CI/CD



### Database Design

PostgreSQL, MongoDB, SQL Server, Redis



### IoT & Automation

Microcontrollers, PLC, SCADA, Embedded



## Experience

### Full-Stack & AI Engineer

Freelance/Contract · Remote

Jun 2023 – Present

- Architected production AI agent systems integrating LLMs with SQL databases, external APIs, and custom tools using MCP, LangChain, and CrewAI
- Built end-to-end ML pipelines for recommendation engines, fraud detection, and behavioral analytics
- Developed full-stack applications with React/TypeScript frontends and Node.js/Python backends with real-time WebSocket features
- Created AI-powered automation tools reducing manual workflow time by 70%+

## Junior Programmer

Sep 2024 – May 2025

Integrum Inteligência Industrial · Hybrid

- Developed industrial ERP system using Delphi with Firebird database, serving 100+ enterprise clients
- Built LLM-powered documentation chatbot using OpenAI API, reducing ticket resolution time by 45%
- Automated documentation pipeline with PasDoc and Jenkins, reducing time from 3 days to 2 hours
- Increased test coverage from 20% to 75% with DUnitX and TestComplete

## AI Model Evaluator & Trainer

Aug 2021 – Jun 2023

Remotask / Outlier · Remote

- Evaluated Large Language Model outputs across complex reasoning, code generation, and NLP tasks
- Conducted prompt engineering and RLHF workflows for major AI research labs
- Reviewed AI-generated code for correctness, safety, and adherence to best practices

## Embedded Firmware Intern

Jan 2022 – Aug 2022

Pramel Equipamentos Eletrônicos · On-site

- Developed firmware for PIC, ESP32, and STM32 microcontrollers for industrial applications
- Designed PCB layouts and electronic circuits for power monitoring systems
- Created machine automation systems for metallurgical industry clients

## Software Engineer

Aug 2017 – Jul 2021

Freelance Platforms · Remote

- Delivered 50+ projects on Upwork, Fiverr, and Workana including payment platforms and automation systems
- Led system migrations from legacy PHP to modern React/TypeScript stacks
- Maintained 4.9+ average rating across 100+ reviews



## Technical Stack

### LANGUAGES

Python

TypeScript

JavaScript

C

C#

Rust

Go

Java

Kotlin

### FRONTEND

React

Next.js

Vue

Angular

Flutter

Tailwind CSS

### BACKEND

Node.js

FastAPI

Django

NestJS

Express

GraphQL

### AI & ML

LangChain

CrewAI

TensorFlow

PyTorch

Hugging Face

OpenCV

### CLOUD

AWS

GCP

Azure

Docker

Kubernetes

Terraform

### DATABASES

PostgreSQL

MongoDB

Redis

SQL Server

MySQL



## Education



## UniRitter University

Bachelor of Computer Science

In Progress · Expected 2028



## Fundação Liberato

Technical Diploma in Electronics

2022 · Embedded Systems & Industrial Automation



## Languages

BR

Portuguese

Native

US

English

Fluent (C1)

ES

Spanish

Basic (A2)

Built with passion · matheus-schumacher.vercel.app

← Back to Portfolio

Download PDF