



● Available for Opportunities

Matheus Schumacher

Senior Fullstack Developer · AI Engineering Specialist

 Email

 WhatsApp

 GitHub

 LinkedIn

 Portfolio



About Me

I build **LAM (AI-as-Tool) agents** at **DeepMind-level depth** — production systems engineered with a proprietary 12-layer cognitive framework spanning perception, memory, security, and outcome optimization. With **6+ years of full-stack and AI engineering experience**, I design architectures that are cost-efficient, scalable, and built to evolve autonomously via **3 Recursive Self-Improvement (RSI) systems** and 13 original mechanisms including Success Trace Extraction.

I also craft **Awwwards-level UI/UX** systems powered by GSAP and Framer Motion, design animated brand identities, and engineer solid backends with Clean Architecture and Cyber-security best practices. I plan software as an architect — from inception to a zero-bug final delivery.



LAM Agent Framework — 12-Layer Architecture

L0

Perception

Deterministic preprocessing — OCR, Voice, and multimodal input normalization before the LLM

L1

Adaptive Decision

Dynamic strategy selection and inference scaling per task complexity

L2

Bayesian Belief

Probabilistic modeling that continuously learns and updates user preferences

L3

Manifold Controller

Selective, semantically-justified information flow (mHC) to prevent context pollution

L4

Memory

OpenViking context management + TurboQuant compression (6× efficiency)

L5

Latency-Aware

Parallel execution engine with speculative pre-execution for sub-second responses

L6

State Compression

Two-tier context management: 85% skim pass / 15% dense retrieval

L7

Outcome Optimization

Strategic pursuit of measurable business goals with ROI as the north star

L8

Hallucination Guard

Best-of-N verification with rigorous claim extraction and source grounding

L9

Emotional Intelligence

Affect tracking and real-time tone adaptation for human-aligned interaction

L10

Orchestration

Tool integration via MCP protocol and LAM agents (UI-as-tool paradigm)

L11

Security

Hardened defense against prompt injections, data leaks, and adversarial inputs



Key Edge: 13 original mechanisms (including **Success Trace Extraction**) + 3 Recursive Self-Improvement (RSI) systems — your agent evolves autonomously after deployment.

**Core Competencies****AI Agent Engineering****Full-Stack Development**

React, TypeScript, Node.js, Python, Next.js, Vite

LAM-style multi-agent systems, MCP,
LangChain, CrewAI



Awwwards-Level UI/UX

GSAP animations, Framer Motion, animated
brand logos



LLM Integration

GPT, Claude, Gemini, Fine-tuning, Ollama, RAG
pipelines



System Architecture

SOLID, Clean Code, Cyber-security,
performance engineering



Cloud & DevOps

Docker, Kubernetes, AWS, GCP, CI/CD, cost
reduction



Database Design

PostgreSQL, MongoDB, SQL Server, Redis,
Firestore



Security Engineering

Prompt injection defense, zero-trust, OWASP,
data privacy



Experience

Full-Stack & AI Engineer

Jun 2023 – Present

Freelance/Contract · Remote

- Designed and deployed **Syne** (syne-spark.com) — a LAM-style agentic quoting platform with autonomous negotiation and real-time pricing logic
- Shipped a **Humanized WhatsApp Sales Assistant** — an agent that learns from top-performing sellers to automate FAQs and product links while maintaining a human conversational tone
- Developed a custom **Android POS Application** for **Newland N960K** smart terminals, enabling seamless on-device transactions and operations

- Architected full-stack applications with React/TypeScript, Node.js/Python backends, real-time WebSocket layers, and AI pipelines reducing manual workflow time by **70%+**

Senior Fullstack Developer

Jan 2026 – Present

LB Solutions · Remote

- Architected LB Solutions, a unified Commerce OS that converges product launches (NewDrop), checkout flows (HeroCart), and team operations (LB Platform) into a single ecosystem
- Developed InboxFlow, an autonomous hybrid-AI email agent that auto-triages 24 categories, flags urgent threads, and executes contract review using unified Engram memory
- Engineered the NewDrop product engine to automate catalog generation and SEO copy, reducing product launch time to <3 minutes and saving 40+ hours per team weekly
- Built real-time logistic sorting, Kanban management, and an integrated Finance Hub, contributing to a 98% team sync rate and a 340% revenue lift for core commerce clients
- Engineered LB Tracking, a premium post-purchase tracking platform for Shopify dropshippers featuring native webhook integration, custom CNAME domains, and fully branded order pages
- Implemented Carrier Masking algorithms powered by 17track API (2,400+ global carriers), hiding supplier origins and converting Chinese logistics traces into a premium branded customer journey

Mid-Level Fullstack Developer

Oct 2025 – Dec 2025

AtivaRecargas.com · Remote

- Acted as the sole developer for the platform, architecting and shipping end-to-end website features, complex cron jobs, and seamless database updates
- Executed core PHP backend maintenance while delivering modern front-end upgrades, including dynamic background animations and comprehensive visual overhauls

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 2022 – 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

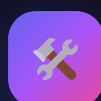
Freelance Developer & Hardware Enthusiast

Aug 2017 – Dec 2021

Independent Study & Local Clients

Foundational period of study and specialization, building casual freelance platforms and embedded systems for peers and academic instructors.

- **Embedded IoT & Hardware:** Engineered a Three-Phase Softstarter, automated Solar Tracker, and a Smart Traffic controller with full IoT integration
- **Software Applications:** Developed a Smart Recruitment System featuring dynamic, adaptive questionnaires
- **Local Projects:** Delivered diverse software and hardware micro-projects to assist teachers, friends, and community members



Technical Stack

LANGUAGES

TypeScript ★ (web / all platforms)

Python (bots / AI / training)

Rust (systems / perf-critical)

C# .NET (enterprise / large clients)

Go (CLI tools)

C (embedded systems)

Java (on demand)

MOBILE

React Native ★

Flutter

TypeScript

Expo (Expo Go / browser testing)

Android POS (Newland N960K)

DESKTOP

Electron

TypeScript

SQLite (embedded storage)

FRONTEND

React ★

TypeScript ★

Next.js (SSR / Vercel deploys)

Flutter

Vanilla CSS

GSAP + ScrollTrigger

Framer Motion

Canvas API

Three.js / WebGL

Lenis Smooth Scroll

Glassmorphism

CSS Houdini (@property)

BACKEND

TypeScript ★

C# .NET ★

Node.js

NestJS

Express

FastAPI

REST APIs

WebSockets

BullMQ

GraphQL

AI ENGINEERING

LLM API Orchestration

Agentic Pipelines

Prompt Engineering

RAG Systems

Multi-Agent Systems

MCP Protocol

OpenAI API

Gemini API

Claude API

Vision & OCR

CLOUD

Firebase (Primary)

GCP

AWS

Azure

Docker

Kubernetes

DEPLOYMENT

Firebase Hosting

SSH Deploy Scripts

Hostinger

Auto GitHub Push

GitHub Actions

CI/CD Pipelines

Automated README Reports

Zero-downtime Deploy

DATABASES

Firestore

Supabase

PostgreSQL

MongoDB

Redis

SQL Server

MySQL

SQLite

CYBERSECURITY

Zero-Trust Architecture

AES Encryption

SHA-256

Bcrypt / Argon2

JWT / PASETO / OAuth

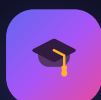
RBAC / ABAC

OWASP Top 10

CORS / CSRF / XSS Protection

Rate Limiting

Prompt Injection Defense



Education & Certifications



UniRitter University

Bachelor of Computer Science

In Progress · Expected 2028



Fundação Liberato

Technical Diploma in Electronics

2022 · Embedded Systems & Industrial Automation



Digital Innovation One (DIO)

Backend Development Bootcamp

2019 · Concluded



Digital Innovation One (DIO)

Frontend Development Bootcamp

2020 · Concluded



Digital Innovation One (DIO)

AI Specialist Bootcamp

2021 · Concluded



Languages

BR

Portuguese

Native

US

English

Fluent (C1)

ES

Spanish

Basic (A2)

