

Tel: +41 76 48 39 404 | Email: marius.anderie@gmail.com | GitHub: https://github.com/moccajoghurt

Marius Anderie

Summary

I help engineering teams make legacy enterprise systems AI-ready. I design and ship production RAG systems, MCP tooling, and AI agent architecture, typically as sole contributor. Deep roots in Clean Architecture, Azure Cloud, and Windows kernel security.

Core Skills

- **AI & LLM Engineering:** Agent Orchestration, Claude Code, Codex, RAG, MCP, Multi-Agent Systems, Context Engineering
- **Backend & Architecture:** Python (FastAPI), C# (.NET 8, ASP.NET Core, EF Core), Clean Architecture, Vertical-Slice CQRS, DDD, Microservices
- **Cloud & Infrastructure:** Azure (AI Search, Web Apps, DevOps, Cosmos DB), Docker, Terraform, CI/CD (Azure Pipelines, GitHub Actions)
- **Systems & Security:** Windows Kernel Development, C/C++, Minifilter Drivers, Roslyn / ts-morph Code Analysis

Professional Experience

Senior Software Architect · Nexplore AG

Bern, Switzerland · Jun 2023 to present

Successfully delivered multiple high-impact projects for key clients, demonstrating leadership in architecture, AI/ML engineering, and full-stack development.

- **Project: AI-Powered Multi-Agent Support Assistant: Defense Client (Switzerland)**
  - *Roles: Software Architect, AI/ML Engineer, Lead Software Engineer (Jan 2024 - Present)*
  - Led the design and delivery of a microservice-based RAG chat assistant using Python, FastAPI, Azure OpenAI (GPT-4o), Azure AI Search, and React.
  - Architected the end-to-end system, built chat, ingestion, and LLM-based evaluation (RAGAS) frameworks.

    - **Impact:** Reduced L1 support tickets by **40%**, improved correct answer rate from **40% to 80%** for 12,000 users, and maintained zero P1 incidents with bi-weekly rollouts.

- **Project: Code Intelligence & MCP Server: Defense Client (Switzerland)**
    - *Roles: AI/ML Engineer, AI Tooling Developer, Software Architect (Jan 2026 - Feb 2026)*
    - Built static-analysis tools (TypeScript/ts-morph for Angular frontend, C#/Roslyn for .NET backend) and a Python MCP server exposing 6 tools for AI coding agents; sole contributor on a 500k+ LOC legacy codebase.
    - **Impact:** AI agents completed benchmark tasks **4.7x faster**; enriched all **715** chatbot actions with extracted business logic in **1.5 hours**; demonstrated a replicable approach for making legacy codebases AI-ready.

- **Project: Automated UI-Action Generation Pipeline: Defense Client (Switzerland)**
    - *Roles: AI/ML Engineer, AI Tooling Developer (Jan 2026 - Feb 2026)*
    - Conceived and solely built a UI-tree capture pipeline (JavaScript bookmarklet, Node.js, Python/FastAPI, Azure OpenAI) that extracts structured action data from a web portal for RAG ingestion.
    - **Impact:** Generated **715** structured actions in **one month**, up from **3** produced by months of manual effort; trilingual localization (DE/FR/IT); received a salary raise in recognition.

- **Project: Monolith-to-Modern Strangler Migration: Defense Client Web Suite**
    - *Roles: Tech Lead, Software Architect, Lead Software Engineer (Jun 2023 - Jan 2024)*
    - Stabilized an 8-year-old .NET/Angular monolith by architecting and initiating a Strangler-Fig migration using YARP, Docker, Nginx, and Vertical-Slice CQRS (.NET 6).
    - Authored a 10-page strategy paper and roadmap, implemented containerization, gateway PoC, and rewrote CI pipeline in Nuke.
    - **Impact:** Secured **CHF >3M** funding for the modernization roadmap, reduced regression defects by **70%**, and cut test pipeline runtime by **33%**.

- **Project: Employee-Data Word Plugin Integration: Coop Group (Switzerland)**
    - *Roles: Solution Architect, Full-Stack Developer, DevOps (4-week build in 2023, ongoing enhancements)*
    - Designed, built, and deployed solo a secure, full-stack data bridge (C#, ASP.NET Web API, Angular, MongoDB, Azure Web Apps, Terraform) for Officeatwork, integrating with Coop's directory services.
    - **Impact:** Shipped MVP in **4 weeks**, enabling dynamic templates for **8,000+** employees. Maintained **>90%** TDD coverage and secured ongoing enhancement requests.

Full-Stack C# / .NET Software Engineer · Techgroup Schweiz AG / Maison du Software

Zürich, Switzerland · Feb 2022 to Jun 2023

- **Project: Track & Trace Platform "TNT": Planzer (Logistics, Switzerland)**
    - *Roles: Software Engineer, Backend Lead (Feb 2022 to Jun 2023)*
    - Engineered a high-throughput microservice (.NET 6, ASP.NET Core, MediatR, EF Core, Onion Architecture) for real-time shipment tracking.
    - Implemented core business logic, idempotent APIs, integration tests, and designed the email notification module.
    - **Impact:** Handled **100,000+ API calls** on launch day with **0 P1 incidents** and 100% availability during migration.

C# .NET Software Engineer (Contract)

Remote · Sep 2021 to Jan 2022

- Developed **blockchain** components in .NET.
- Shipped a **MAUI** mobile application and a **Blazor** web portal for the same product suite.

C/C++ Software / Kernel Engineer · Conpal GmbH

Frankfurt am Main, Germany · Jul 2019 to Aug 2021

- **Project: Enterprise File-Encryption Minifilter Driver: LANCrypt (Windows)**
    - *Roles: C/C++ System Programmer, Windows Kernel Developer*

- Maintained, hardened, and re-architected a production-grade Windows kernel minifilter driver (C++17, Windows Filter Manager) for transparent file encryption.
- Implemented self-protection mechanisms (`ObRegisterCallbacks`) and analysed >50 customer crash dumps to assembly level.
- **Impact:** Deployed on **>100,000** endpoints; **0** successful runtime-tampering incidents post-hardening; cut crash-dump resolution time by **60%**.

Selected Personal & Academic Projects

- **Distributed Autonomous Agent System: 8-Repo Architecture** (Personal R&D, 2019 to 2025)
  - *Roles: Software Architect, Systems Developer, DevOps*
  - Designed and built an 8-repository distributed system (C# .NET 8, Python/FastAPI, Lua, ZeroMQ, Redis, GPT-4o, Recast/Detour) orchestrating 18 simultaneous autonomous agents across GPU-VPS and local infrastructure. Architecture includes a game-independent behavior tree framework with reflection-based command discovery, real-time IPC via ZeroMQ, and LLM-powered natural-language processing pipeline.
  - **Impact:** Fully autonomous end-to-end pipeline; 18 concurrent agents across distributed infrastructure; 337 waypoint routes; 120+ behavior tree node types.
- **Community-Driven Forum Platform** (Personal Project, 2021 to Present)
  - *Roles: Founder, Full-Stack Engineer, DevOps*
  - Bootstrapped and evolved a microservice forum platform (Python FastAPI, .NET 8 Blazor, MySQL, Angular, Nginx, Grafana) using a Strangler-Fig HTML proxy approach.
  - **Impact:** Scaled to **100,000+** daily page views with 99.9% uptime; revenue-positive; increased active posters by **+25%**.
- **MemWars: Game-Security Research Framework** (M.Sc. Thesis, Philipps-University Marburg, 2018 to 2019)
  - *Roles: Security Researcher, C++ Developer, Reverse-Engineer*
  - Built a Windows-kernel-aware security testing framework (C++17, Lua, WinAPI) to evaluate anti-cheat protection systems. (github.com/moccajoghurt/MemWars)
  - **Impact:** Evaluated 4 commercial protection suites across 9 titles, identifying kernel-mode security gaps. Open-sourced project gained 48 stars.

Education

M.Sc. Computer Science, Philipps-University Marburg *Marburg, Germany · Oct 2016 to Jan 2019* - Focus: Software Design, Refactoring, OO Design Patterns - Thesis: "MemWars: Game-Security Pen-Testing Framework"

B.Sc. Computer Science, Frankfurt University of Applied Sciences *Frankfurt am Main, Germany · Apr 2012 to Apr 2016* - Focus: Software Engineering, Machine Learning - Early research: Robot localization (Honda Research Institute), pattern recognition lab (university)

Languages

- **German:** Native
- **English:** Fluent (Spoken & Written)