Martin Gottweis

AI Agents & LLM Systems · Technical Lead

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EXPERIENCE

Software Engineer, Meta

June 2021 - August 2026 · New York, NY

AI Personalization

- Led technical direction for AI personalization systems enabling privacy-aware, context-sensitive AI agent experiences across Meta products.
- Built graph-RAG infrastructure powering messaging search for ~500M users.
- Engineered static-knowledge context injection for WhatsApp AI, serving ~300K queries/day.
- Designed persistent-memory algorithms enabling AI agents to retain, retrieve, and act on user signals over time.
- Established architecture and implementation patterns adopted by the broader team.

Integrity

- Technical lead for two of Meta's core Integrity systems, including one operating at 8B+ QPS.
- Led changes to ultra-high-scale enforcement infrastructure where failures could affect harmful-content enforcement or platform availability across major Meta products.
- Delivered production changes at extreme scale despite limited access to standard testing, rollout, and gating infrastructure.

Senior Software Developer, Booking.com

April 2017 - June 2021 · Amsterdam, Netherlands

- Drove 0-to-1 product development in Booking.com's new-ventures division, shipping prototypes into production for millions of travelers a day.

- Built targeted-discounting and real-time intent-capture systems used to personalize offers and improve booking conversion.
- Technical lead for Booking.com's hotel page, the core revenue funnel for a global travel platform, orchestrating 10K+ QPS across pricing, availability, personalization, merchandising, and accommodation-data systems to generate customized hotel pages at scale.

Full-stack Software Developer, KISKA

December 2015 - April 2017 · Salzburg, Austria

- Built rapid-prototyping platforms and conceptual software, such as motorcycle dashboards, at the award-winning design studio behind the KTM motorcycle brand.

Software Engineer, ASC Applied Software Consultants

June 2007 - December 2015

- Designed school-scheduling software for the Swiss market, solving complex real-world constraints such as teachers shared across multiple schools and travel times between campuses.
- Built internal tools and embedded systems for a market leader in school scheduling software.

SKILLS

Core competencies: AI agents, LLMs, RAG, graph RAG, context engineering, model evaluation, fine-tuning, AI personalization, recommendation systems, distributed systems, large-scale systems (8B+ QPS), platform & developer tooling, privacy-aware data engineering, machine learning, technical leadership.

TECH STACK

Languages: Python, Rust, C++, TypeScript / JavaScript (Node.js), PHP / Hack, SQL

AI / ML: PyTorch, LLMs, RAG & graph RAG, AWS Bedrock, LangChain, vLLM, vector databases (pgvector, Pinecone), embeddings, model evaluation & fine-tuning, Model Context Protocol (MCP)

Infrastructure & Cloud: AWS, Kubernetes, Docker, Terraform, gRPC, distributed systems

Data: PostgreSQL, Kafka, Redis, large-scale data pipelines

PROJECTS

Property questions and answers

booking.com/hotel/nl/luxury-suites-amsterdam

Introduced a major new feature, a questions-and-answers product, into Booking.com's core funnel, helping users make better-informed accommodation choices for their trips while also benefiting Booking.com.

Enduro.js

github.com/Gottwik/Enduro · ★ 681

Designed and open-sourced a lightweight, code-only content management system, built for developer speed and simplicity over heavyweight, database-driven alternatives.

EDUCATION

Master's Degree in Aerospace Engineering

University of Zilina 2010 - 2012

Bachelor's Degree in Aerospace Engineering

University of Zilina 2007 - 2010