Berkay Orhan

- Nationality: Swedish
- 2002
- Norrköping, Sweden

- Program: M.Sc Media Technology and Engineering
- Languages: *Swedish* Native, *Turkish* Native, *English* Advanced.

- 072-321-0958
- @ berkayorhan@hotmail.se

- Luntgatan 60219, Norrköping

- in linkedin.com/in/berkay-orhan-b71256204
- github.com/Berkay2002
- berkay.se

PROJECTS

Agent Mesh
Multi-Agent AI System · Personal
Extensible multi-agent AI application with 4 specialized agents (General, Research, Coding, Knowledge) that collaborate through inter-agent communication. Built with Next.js 15, Vercel AI SDK, Google Gemini 2.5 Pro/Flash, and Google Cloud Run for secure code execution.

Clairvoyant
AI Chat & Research Platform · Personal
Advanced AI platform featuring dual-agent architecture with intelligent chat agents and comprehensive research capabilities. Built with Next.js 15, Vercel AI SDK, Google Gemini integration, generative UI components, and multi-step research workflows.

STT-Service
Real-Time Speech-to-Text Microservice · Linköping University
High-performance speech-to-text microservice with sub-300ms latency for conversational AI applications. Built with Python, FastAPI, Whisper, WebSockets, and CUDA acceleration.

Kliv Idrottsförening
Sports Association Website · Personal
Modern website for Swedish judo/martial arts association with real-time Google Calendar integration, admin dashboard, email notifications, and custom monochromatic design system.

Retrofy
AI-Powered Image Editing Platform · Personal
Advanced image editing platform with AI-powered features for real-time image manipulation and generation workflows.

Albyradet
Swedish Non-Profit Web Application · Personal
Comprehensive web application built with modern technologies and responsive design principles.

LiTHePlan
University Course Planning · Personal
Course planning application for Linköping University students with scheduling and academic workflow features.

Animatch
Research Project with Academic Paper · Linköping University
Project with associated academic research paper demonstrating advanced technical implementation and research methodology.

Solar System Simulation
3D Visualization Project · Linköping University
Interactive 3D solar system simulation with realistic physics and orbital mechanics visualization.

TECHNICAL SKILLS

Languages	TypeScript, Python, JavaScript, C++
Web/Fullstack	Next.js, React, Node.js, REST APIs, shadcn/ui, Tailwind CSS, Framer Motion, Radix UI
Backend/APIs	FastAPI, WebSockets, Microservices, API development
AI/ML/Agents	Multi-agent systems, Agent orchestration, AI SDK, LangChain, Gemini SDK, Google Vertex AI, PyTorch, Whisper, faster-whisper, CUDA
Databases	Supabase, PostgreSQL, Qdrant (Vector DB), Neo4j (Graph DB), Neon, Redis
Cloud/DevOps	Vercel, Google Cloud Compute Engine, Google Cloud Run, Docker
Real-time Systems	Speech-to-text (STT), Text-to-speech (TTS), Large Language Models (LLM), WebSocket streaming
Specialized	Agentic RAG (Retrieval-Augmented Generation), MCP (Model Context Protocol), Microservices architecture, Deep Research, Workflow Patterns

EXPERIENCE

Summer 2023 & 2024
Part-time Employee
LIDL · Stockholm
Performed various tasks including stocking shelves, assisting customers, operating the cash register, and maintaining cleanliness in the store.

EDUCATION

2021–2026 (Ongoing)
Master of Science in Media Technology & Engineering
Linköping University
5-year integrated program. Completed bachelor's phase (2021-2024) with focus on programming, mathematics, and signal processing. Currently in master's phase specializing in Machine Learning, AI and Web development.

2019–2021
Naturvetenskapsprogrammet
Huddinge Gymnasium

2018–2019
Naturvetenskapsprogrammet
Tumba Gymnasium