ROBERT VOKÁČ, BSc

Czech Republic | robertvokac@robertvokac.com
github.com/robertvokac | github.com/openeggbert

PROFILE

Software Engineer focused on backend development, modern C++, and system-level design.

9 years of experience in backend systems (Java, SQL). Currently focused on modern C++ backend and networking projects.

TECHNICAL SKILLS

Languages
C++ (modern C++20/23), SQL, Java

Systems & Tools
CMake, Git, CLion, Bash

Core Concepts

- Backend architecture & modular design
- Database design & data modeling
- Plugin systems & extensibility
- Event-driven systems
- Caching & performance optimization

Operating Systems
Linux (daily use), Windows

KEY PROJECT HIGHLIGHTS

- Designed modular backend architecture in modern C++ from scratch
- Implemented plugin system enabling runtime extensibility
- Built custom data modeling system replacing traditional ORM approaches
- Designed event-driven system for data change propagation

PROJECTS

Core HTTP – C++ networking project (early design phase)

- Designing the architecture of an HTTP server in modern C++
- Exploring request parsing, connection handling, and server structure
- Exploring network programming and low-level server design

Mind Net – Modular C++ Backend Platform (finished)

GitHub: github.com/robertvokac/mind-net

Designed and implemented a modular backend platform in modern C++ **from scratch**.

Project archived after reaching a stable state.

Key features:

- ~40k lines of modern C++ code.
- Multi-module architecture.
- Modular backend system with **plugin-based extensibility**
- Custom **data modeling** layer defined directly in C++
- Automatic REST API and database layer generation
- **Event-driven system** with triggers (before/after data changes)
- Dynamic UI generation driven by backend metadata
- Role-based authentication and authorization
- Caching mechanisms for performance optimization
- Custom database migration tool and built-in task scheduler

PROFESSIONAL EXPERIENCE

Software Engineer

Assist, spol. s r. o. — 2017–present

- Developed and maintained production backend systems
- Designed and optimized SQL database structures
- Contributed to system architecture and long-term maintainability
- Worked in team environment using Git and Agile workflows

Technologies: Java, SQL, Git, Bash

EDUCATION

Czech University of Life Sciences Prague
BSc in Computer Science (2014–2017)

Secondary Technical School Hořovice
Informatics in Economics (2008–2012)

LANGUAGES

English – B2 (technical documentation, team communication)