

Thomas Sedlmair

C++ Software Developer

Profile

I'm a C++ Developer with over 7 years of experience, fueled by a passion for blogging and open source. I'm dedicated to continuous improvement, constantly refining code quality. I firmly believe that thorough testing and open communication are essential for project success. By keeping up with the latest trends in the community, I strive to create state-of-the-art software.

Employment History

Software Developer at Validas AG, Munich

April 2024 — Present

At Validas I'm currently working on two projects:

- A generic C++14 library for a low-code solution to generate automated tests
- A C++20 transpiler to convert C++ sources to XML/JSON.

Software Developer at Yunex Traffic, Munich

July 2021 — February 2024

I developed innovative software solutions tailored for intersection controllers and traffic engineers, operating on both Linux for controllers and Windows for simulation environments. During my time at Yunex Traffic, I worked on two projects:

Frameworks: Google Protobuffer, Lua, Sol, GTest, Cucumber, spdlog, fmt and Boost

- A midsized C++17 engine for traffic controllers with a Lua interface to run specific programs on an intersection
- A C++20 Cucumber wrapper to enable BDD for traffic actuated intersections together with a custom VS Code extension (TypeScript)

Software Developer at Siemens Mobility GmbH, Augsburg

August 2018 — June 2021

In this role, I developed and maintained a C/C++ API for traffic intersection controllers, enabling traffic engineers to implement custom logic for actuated intersections. I integrated testing into our legacy code and modernized an interface with Protobuf and Boost.Asio.

Software Engineer at Renk Test System GmbH, Augsburg

October 2016 — July 2018

I engineered software solutions for Renk's test rigs, using C/C++ and PLC controllers. Notably, I contributed to two key projects: the Chassis Dynamometer Test Rig and the Double Clutch Test Rig.

Details

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Links

Coding with Thomas (Blog)
GitHub
CWT-Cucumber: A C++
Cucumber Interpreter

Skills

C++14/17/20

Lua

Cucumber

Conan

CMake

TypeScript

Python

Docker

Git

Jira

Doxygen + Sphinx

Languages

German

English

Spanish

Hobbies

Diving, Mountainbiking, Snowboarding, Coding, Traveling, Basketball, Reading

Education

M.Eng., Systems Engineering, University of Applied Sciences, Ulm March 2015 — October 2016

B.Eng., Electrical Engineering, University of Applied Sciences, Augsburg

October 2011 — March 2015

★ Personal Project

CWT-Cucumber: A C++ Cucumber Interpreter

I independently developed a Cucumber interpreter entirely in C++, following the principles outlined in *Crafting Interpreters* by Robert Nystrom. This open-source project compiles Cucumber files into executable bytecode and runs them within its virtual machine. You can explore the project on my GitHub page.