

Juan Cruz Viotti

Expert O'Reilly author, Fractional CTO , JSON Schema TSC

SUMMARY

Award winning University of Oxford alumni, O'Reilly author, member of the JSON Schema Technical Steering Committee, 10+ experience as a C++ system engineer, performance and data consultant, binary serialisation expert, ex-contractor at Postman (lead provider of API tooling), ex-Engineering Lead at Balena (popular IoT platform), and creator of the popular Etcher open-source desktop application (within the top 700 public repositories on GitHub as of 09/24).

TECHNICAL SKILLS

Main Technical Skills	JSON Schema (5 yr.), C++ (10 yr.), Node.js (8 yr.)
Programming Languages	C++ (10 yr.), JavaScript, TypeScript
C++ Libraries and Tools	C/C++/C# (2 yr.)
Java Libraries and Tools	JSON, JSON Schema (5 yr.)
JavaScript Frameworks	Node.js (8 yr.)
Third Party Tools / IDEs / SDK / Services	CMake
Project Management & Administration	Technical Writing

I'm a Computer Scientist with experience in startups, open-source, and academia. Some facts about me:

- I offer consulting services on topics including C++, CMake, macOS, JSON Schema, software architecture, and data.
- I co-authored an O'Reilly book: *Unifying Business, Data, and Code: Designing Data Products with JSON Schema*. Read it online on O'Reilly, or buy it from Amazon and eBooks.com.
- At the University of Oxford, I won the 2022 CAR Hoare prize for the best dissertation and accompanying papers in the area of Software Engineering for my research around JSON BinPack. JSON BinPack made a breakthrough

on 40 years of space-efficient telecommunication and binary serialization technologies, being more space-efficient than 13 other popular technologies in every single tested case

- At Postman, I led the development of Starship, a C++ framework to create cross-platform native applications
- I'm a TSC member of the JSON Schema open-source organization
- I'm the original author of Etcher, a popular open-source cross-platform image flasher. This desktop app is recommended by a range of GNU/Linux distributions, and was highlighted on magazine
- I lead a London-based C++ open-source research lab called Sourcemeta providing cutting-edge JSON-related technologies. There, I maintain high-performance JSON related projects, including a state-of-the-art JSON Schema compiler up to 200x faster than alternatives
- I own the Learn JSON Schema reference documentation website, which serves more than 9k monthly users

