## Chapter 1

## Related work

The Nickel Language Server follows a history of previous research and development in the domain of modern language tooling and editor integration. Most importantly, it is part of a growing set of LSP integrations. As such, it is important to get a picture of the field of current LSP projects. This chapter will survey a varied range of popular language servers, compare common capabilities, and implementation approaches. Additionally, this part aims to recognize alternative approaches to the LSP, in the form of legacy protocols, extensible development platforms LSP extensions and the emerging Language Server Index Format.

## 1.1 Language Servers

- 1.1.1 Considerable dimensions
- 1.1.1.1 Language Complexity
- 1.1.1.2 LSP compliance
- 1.1.1.3 Features
- 1.1.1.4 File processing
- 1.1.1.4.1 Incremental
- 1.1.1.4.2 Full
- 1.1.2 Comparative Projects
- 1.1.3 Honorable mentions
- 1.2 Alternative approaches
- 1.2.1 Platform plugins
- 1.2.2 Legacy protocols

- 1.2.3 LSP Extensions
- 1.2.4 LSIF