Porting a Statistics Language Interpreter to Rust

As part of our ongoing research, we are currently building a platform for secure statistical analysis based on SGX. The current prototype relies on a very simple statistics language, which we are planning to extend in the future.

The goal of this project is to port an existing statistics language interpreter, such as PSPP, to the Rust programming language. Rust features a rich type system and can guarantee memory-safety and thread-safety during compile time, which makes it a great candidate for building safe and fast programming language interpreters.

nom is a parser combinators library written in Rust that allows to build safe parsers without compromising on speed or memory consumption. This library can be used as a starting point to implement the parser.

Suitable for students with experience in C or Rust and an interest in building programming language interpreters/compilers.