Overview

This project is to implement a decision procedure for the equational theory of allegories. This equational theory is decidable, which has been shown by Dougherty and Gutierrez. This project is a first implementation as far as we know. It is named AllegEq. It could be a handy tool for computer scientists and software engineers using relational calculus, supplementing interactive proof assistants.

On the implementation side, the pure functional programming language Haskell is used for the entire project. With Haskell the developing is more precise and rigorous.