

Disco Lang

- A language designed to bring functional programming and formal methods into discrete mathematics.
- Syntax must be based on prior mathematical knowledge.
- Good error messages are extremely important.
- Joint work with Brent Yorgey, Hendrix College.

```
implication : B -> B -> B
implication x y =
  {? false   if x and not y,
   true      otherwise
  ?}
```

Haskell QuickGrader

- An auto grader for Haskell assignments.
- Grading is done using the QuickCheck library.
- Incorporated into a Gitlab server.
- Students just push on solution branch to trigger grading, and report is generated and pushed back.