The High Assurance Software Group Epic

High Assurance Software Group

Tweag.io

September 25-28 2022



Introduction

Who are we?

- A technical group among Tweag engineers
- Lucas, Florent, Carl, Facundo, Mathieu, Nicolas and Georg
- We have formal methods background
- Created a bit more than a year ago around auditing activity

What do we do?

- Advocate for software safety
- We audit Cardano smart contracts
- We maintain cooked-validators and Pirouette
- We conduct research activities and aim for extending our involvement in formal methods community



Outline

- 1 Introduction: the HAS group
- Our auditing activity
- Testing smart contracts: Cooked-validators
- Pirouette, a symbolic evaluator engine
- Liquid Haskell and the HAS
- Conclusion

