# Mid-term paper for Programming Theory

#### Yushi Ogiwara

November 18, 2019

### 1 Objective

Pick one programming language, and explain about that. At here, I'll explain about Pony language [1] through description of features and performance, sample codes, and type proof theory.

#### 2 Features and Performance

#### 2.1 Simple description from official page [1]

Pony is an open-source, object-oriented, actor-model, capabilities-secure, high-performance programming language.

Pony is type safe. Really type safe. On top page[2], there a link for mathematical proof paper. Ill explain about that in

## 3 Example Codes

# 4 Type proof theory

#### References

- [1] Pony https://www.ponylang.io
- [2] Deny Capabilities for Safe, Fast Actors https://www.ponylang.io/media/papers/fast-cheap-with-proof.pdf