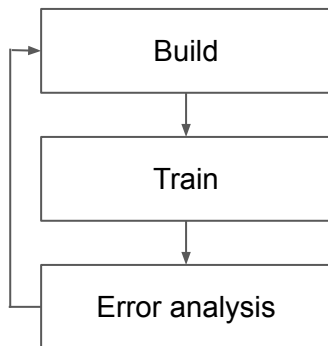


Uncle Bob' SOLID Principles for Machine Learning Engineers

Valerio Velardo

ML project phases

R&D



ML project phases

R&D

- Code can be scrappy
- Get the job done

ML project phases

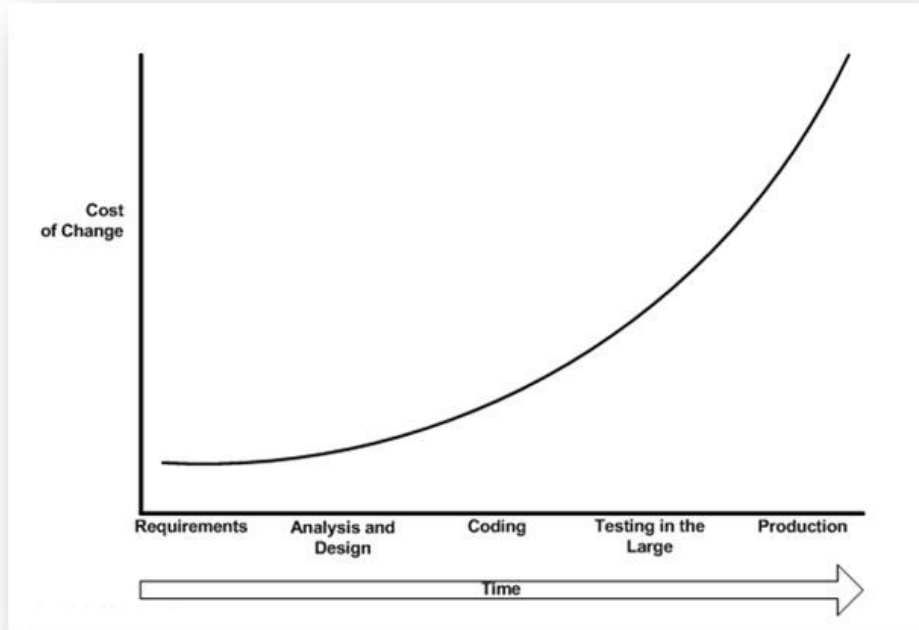
R&D

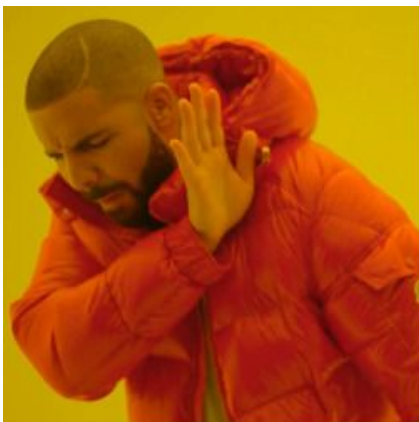
- Code can be scrappy
- Get the job done

Production

- Clean code
- Reduce cost to change/maintain ML infrastructure

Cost of change in software engineering





Production



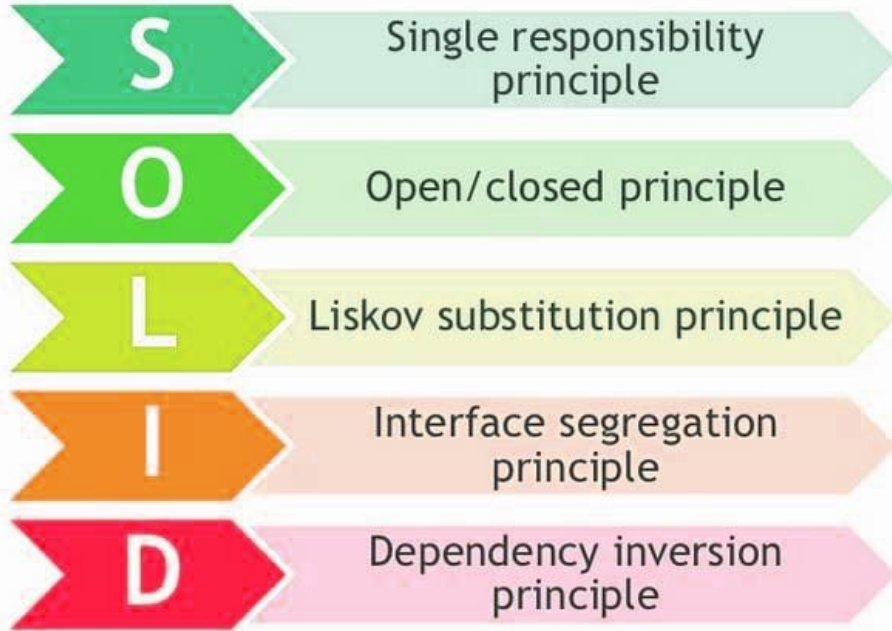
R&D

Uncle Bob



Data scientists start
writing SOLID code!

SOLID principles



SOLID ML pipelines

- Easier to understand
- More flexible
- More maintainable

What you'll learn

- Define SOLID principles

What you'll learn

- Define SOLID principles
- Design cleaner / more maintainable code

What you'll learn

- Define SOLID principles
- Design cleaner / more maintainable code
- Identify SOLID-related *smells* in your code

What you'll learn

- Define SOLID principles
- Design cleaner / more maintainable code
- Identify SOLID-related *smells* in your code
- Refactor ML code to adhere to SOLID principles

How you'll learn it

- 1 video per SOLID principle
- Theory
- Simple Python code examples

Who's this series for?

- AI / ML engineers
- Data scientists
- Recent computer science graduates
- Computer science / music tech students
- Beginner / intermediate programmers

Prerequisite

- Basic knowledge of Python

Where do I get code/slides?



Join the community!



thesoundofai.slack.com

What next?

- Single-responsibility principle