Building Reproducibile Al

"You wouldn't download a car?"

J. Setpal

October 6, 2022



SIGAI

- 1 Why it's Worth Your Time
- 2 Package Management
- 3 Tracking Code
- 4 Tracking Data
- **6** Project Managment

- 1 Why it's Worth Your Time
- Package Management
- Tracking Code
- 4 Tracking Data
- 6 Project Managment

ML as a Science

• Foundationally, Machine Learning is a beautiful clusterf*ck.

ML as a Science

- Foundationally, Machine Learning is a beautiful clusterf*ck.
- Proudly.



ML as a Science

Imagine having to go debug that.

- 1 Why it's Worth Your Time
- Package Management
- Tracking Code
- Tracking Data
- 6 Project Managment

• Package managers are SAT solvers.

SIGAI

- Why it's Worth Your Time
- 2 Package Management
- 3 Tracking Code
- Tracking Data
- 6 Project Managment

Git

GitHub

- Why it's Worth Your Time
- Package Management
- Tracking Code
- 4 Tracking Data
- 6 Project Managment

DVC

MLFlow



DagsHub

TensorBoard

- Why it's Worth Your Time
- Package Management
- Tracking Code
- 4 Tracking Data
- **6** Project Managment

CookieCutter

Death to Jupyter Notebooks

SIGAI Building Reproducible AI October 6, 2022

Module-Based Development

Thank you!

Have an awesome rest of your day!

Slides: https://cs.purdue.edu/homes/jsetpal/slides/mlops.pdf