

# **Effective Programming Practices for Economists**

## **Data Analysis in Python**

### **Python's Data Analysis Ecosystem**

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# Data ecosystem in Python

- pandas
- polars
- pyarrow
- sqlalchemy
- DuckDB
- ...

# Econometrics stack

- statsmodels
- linearmodels
- specialised
  - quantecon
  - estimagic
  - pyblp
- ...

# Basic machine learning stack

- scikit-learn
- xgboost
- sktime
- keras
- pymc
- ...

# Advanced machine learning stack

- **jax**
- flax
- **pytorch**
- torchvision
- transformers
- ...