OpenSourceEconomics

A platform for transdisciplinary collaboration

November 22, 2019

Visit us on

Github

Computational modeling in economics

- provide learning opportunities
- assess importance of competing mechanisms
- predict the effects of public policies

Development

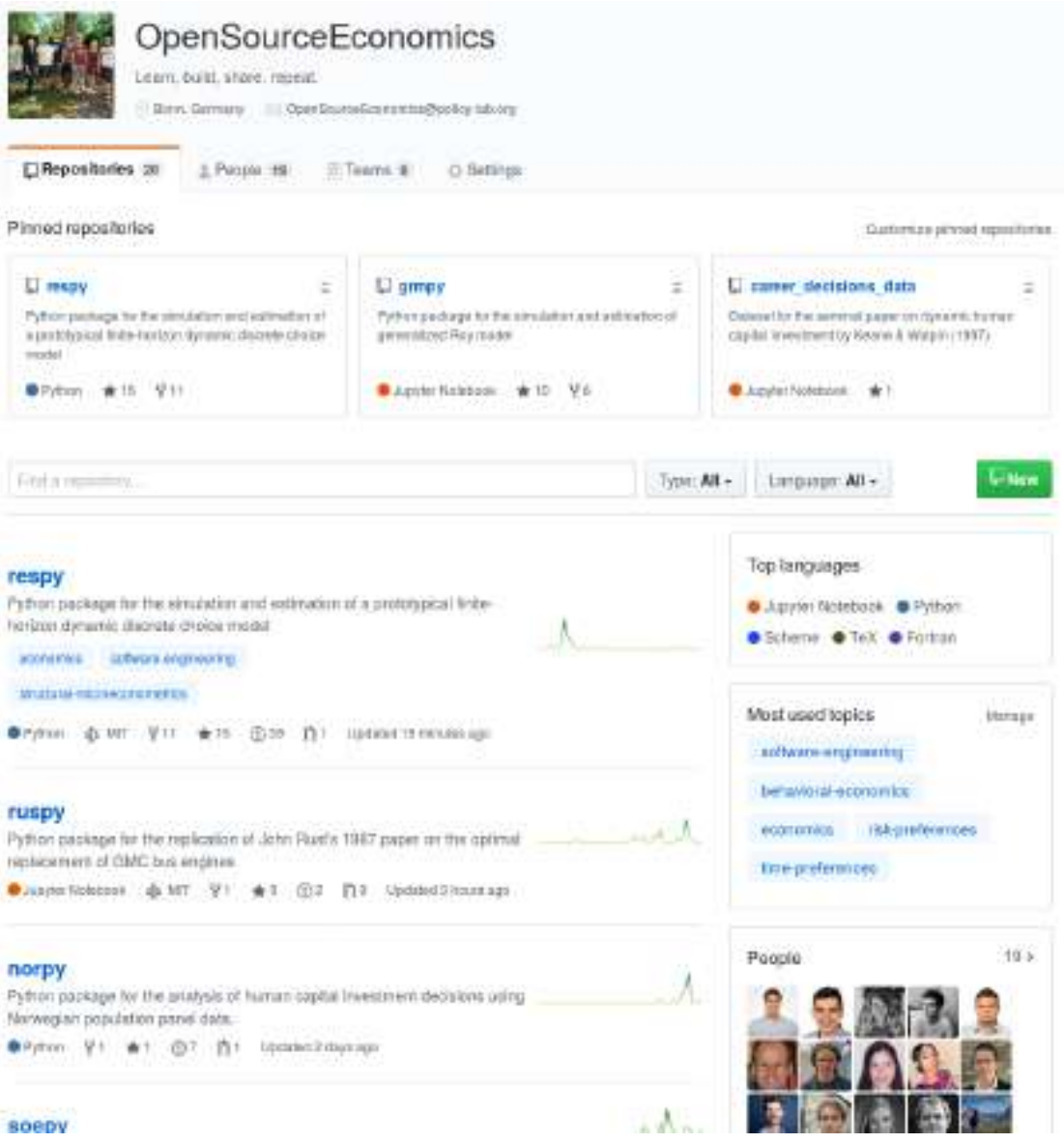
- economic model
- mathematical formulation
- computational implementation

Application

- verification
- estimation
- validation
- uncertainty quantification

OpenSourceEconomics

We are a group of economists using computational models in the pursuit of our research. By adopting sound software engineering practices, we hope to leverage tools from computational science and increase the transparency and extensibility of our implementations. In doing so, we expand the set of possible economic questions that we can address and improve the quality of our answers.


OpenSourceEconomics
Learn, build, share, repeat.
Repositories 20
Pinned repositories
respy
gmpy
career_decisions_data
Top languages
Most used topics
People
respy
Python package for the simulation and estimation of a prototypical finite-horizon dynamic discrete choice model
ruspy
Python package for the replication of John Rust's 1987 paper on the optimal replacement of GMC bus engines
norpy
Python package for the analysis of human capital investment decisions using Norwegian population panel data.
soepy

Members

- Professors
- Postdoctoral researchers
- PhD students
- Master students
- Bachelor students

Models

- respy
- soepy
- ruspy
- grmpy

Infrastructure

- estimagic
- ose_utils
- datasets

Table Of Contents

Quickstart
Tutorials
Replications
Economics
Software
Development
API
Additional Information

Search

Go

Enter search terms or a module, class or function name.

Welcome to respy's documentation!

PyPI | GitHub | Issues | Pull Requests

respy is a tool to solve, simulate, and estimate structural econometric models. It provides the computational support for several research projects that analyze the economics driving agents' educational and occupational choices over their life cycle within the framework of a finite-horizon discrete choice dynamic programming model.

The package is under ongoing development. We add new features every week and try to make it more flexible and easier to use without sacrificing execution speed. Our goal is to cover any model that falls under the classification of Keane-Wolpin-Eckstein models as proposed in a recent survey by Aguirregabiria and Mira (2010) and we are almost there. Already, you can replicate the seminal work by Keane and Wolpin (1994) and Keane and Wopin (1997).

Please visit the rest of our documentation to get more detailed information.

- Quickstart
- Tutorials
- Replications
- Economics
- Software
- Development
- API
- Additional Information

If you have any questions or comments, please do not hesitate to contact us on slack or file an issue on GitHub.

license MIT

estimagic

latest

Search docs

CONTENTS:

- Introduction
- Estimation
- Differentiation
- Inference
- The Dashboard
- Module reference
- Code Conventions

Read the Docs v: latest

Docs » Welcome to estimagic's documentation! Edit on GitHub

Welcome to estimagic's documentation!

Contents:

- Introduction
  - Estimation
  - Inference
  - Automate the boring stuff
  - Give you freedom
- Estimation
  - Overview
  - The params DataFrame
  - Specification of Constraints
  - List of algorithms
- Differentiation
  - Overview
  - Functions
  - Methods
- Inference
- The Dashboard
  - Overview
  - Tabs
  - Options

Development

- GitHub organization
- Gitflow workflow
- code reviews
- testing harness
- continuous integration

Support

- team meeting
- chatroom
- courses
- hackathons
- quality guide

Events

- conferences
- retreat

Figure: Impressions

PASC

Retreat

Cooperations

DIW BERLIN

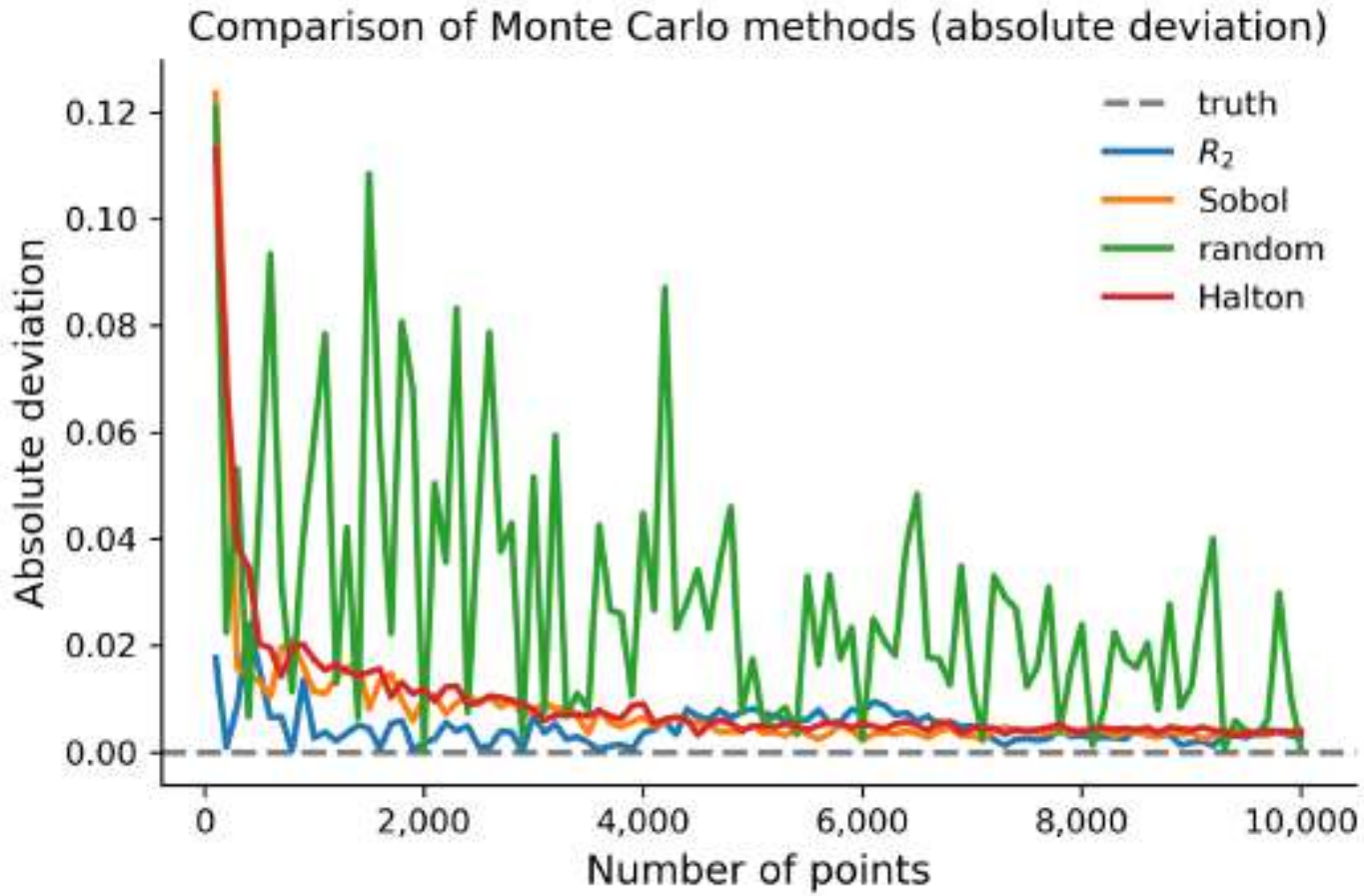
SMART DATA ANALYTICS
FROM DATA TO KNOWLEDGE

Institute for
Numerical Simulation

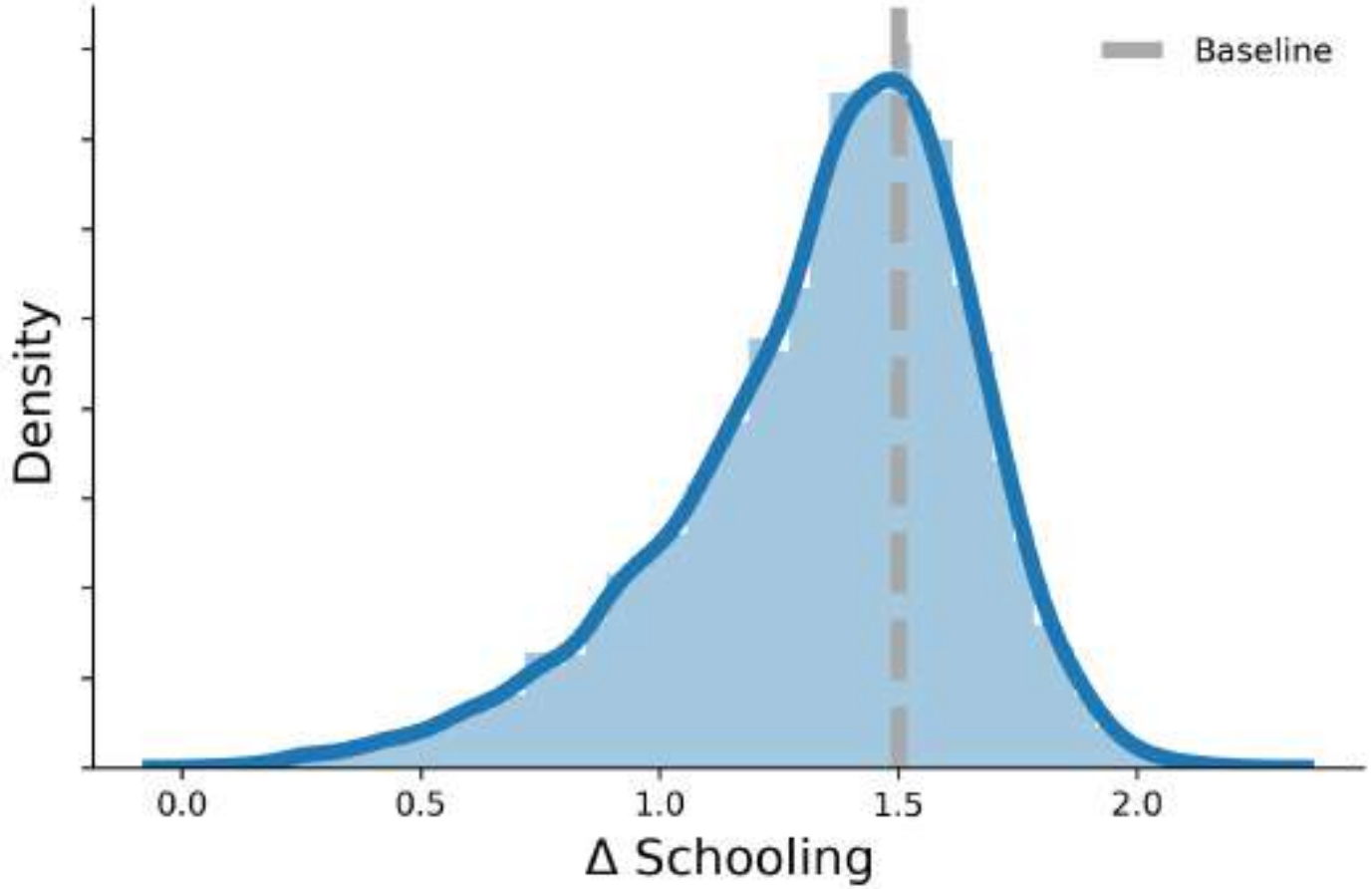
Statistisk sentralbyrå
Statistics Norway

Example projects

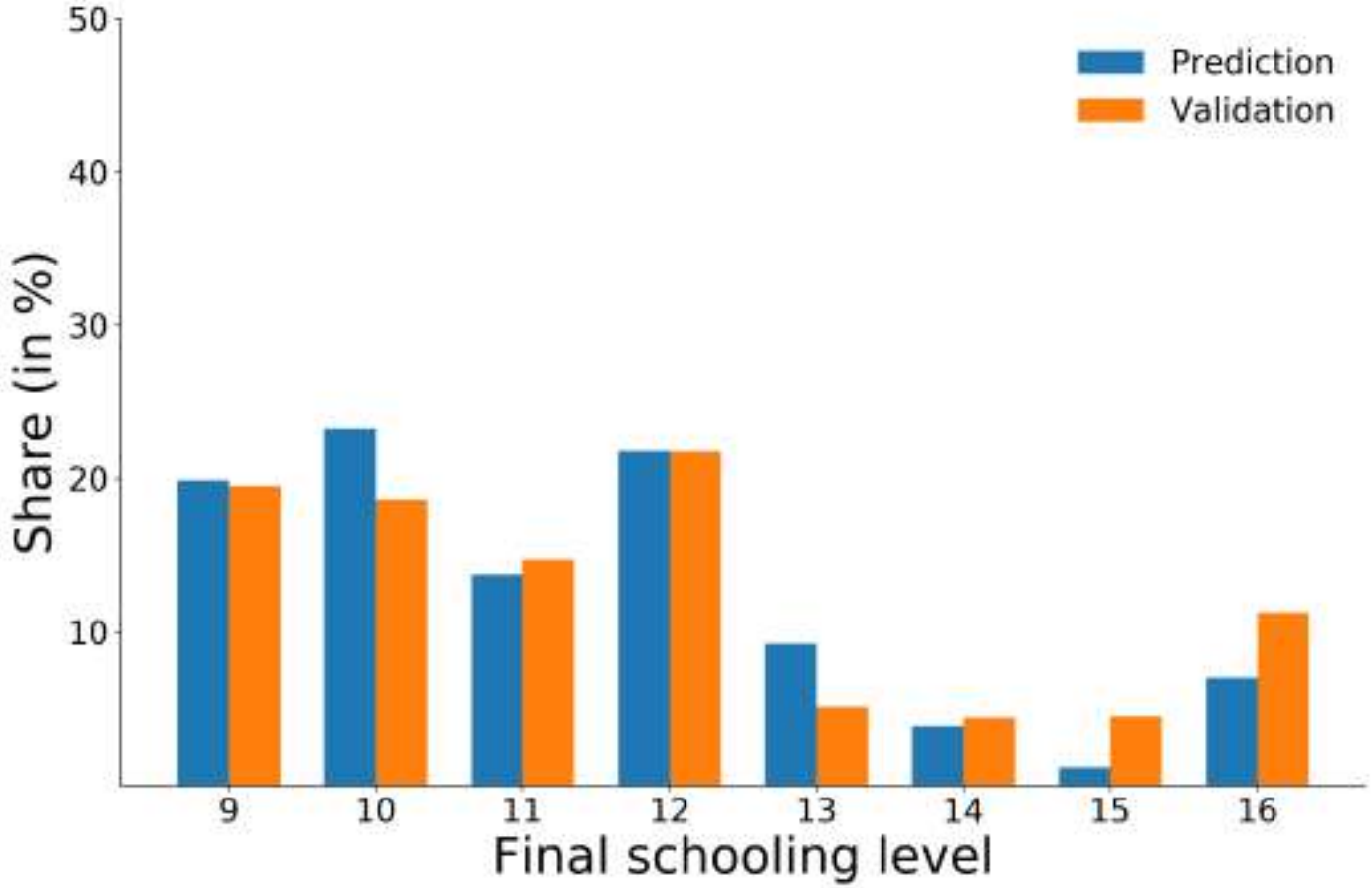
Advanced numerical integration



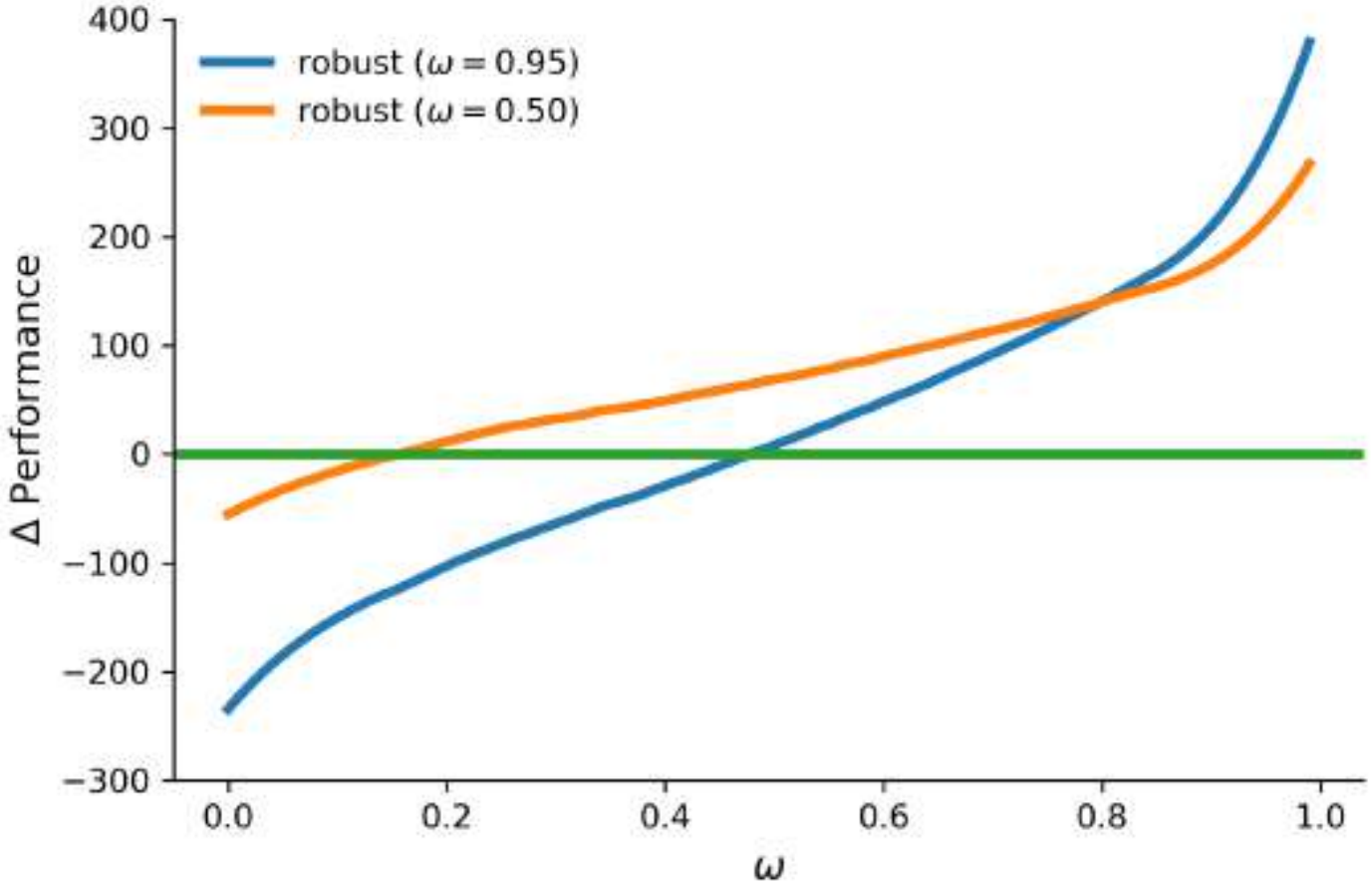
Uncertainty quantification



Option value of schooling



Robust decision making



Join us!

GitHub	http://bit.ly/ose-github
Meetup	http://bit.ly/ose-meetup
Slack	http://bit.ly/ose-slack