

Introducing the Econ-ARK: Economics “Algorithmic Repository and toolKit”

Generic Presentation

May 23, 2018

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- ① Solving dynamic stochastic optimization problems
 - 'Hard' Bellman problems with uncertainty, 'kinks,' nonconvexities
- ② Simulate behavior of populations of agents
- ③ Finding equilibria for markets/economies populated by such agents

Who Has Produced It?

Name	TLA	Affiliation
<i>Christopher D Carroll</i>	CDC	JHU, CFPB
<i>David C Low</i>	DCL	CFPB
<i>Nathan M Palmer</i>	NMP	OFR
<i>Matthew N White</i>	MNW	UDel, CFPB
<i>Alex Kaufman</i>	ABK	CFPB → ? (Timbuktu?)
<i>Jiaxiong Yao</i>	JXY	JHU → IMF

Nothing herein may be interpreted as reflecting opinions of

- CFPB - United States Consumer Financial Protection Bureau
- JHU - Johns Hopkins University
- IMF - International Monetary Fund
- OFR - Office of Financial Research, U.S. Treasury
- UDel - University of Delaware

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- Hire Programmers, RA's, Open Source Project Managers, etc etc

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 - Unlike Noah's, our ARK can hold more than two of each kind!
 - Ultimate goal: Get examples on the ARK of all types of animal (model)

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 - Progress very slow
 - Confidence is not very high

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Remove the excuse 'Structural model was not worth the effort'

Why Are Policy Institutions So Interested?

Who?

- Participation: CFPB, OFR, IMF

RA models unable to address key questions in Great Recession

Polymaking = Applied Theory. Options:

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- 1 Informal, intuitive, “wetware” theory
- 2 Formal, structural, “software” theory

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17th and 18th century version of github.com!

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