# Mechanism Design Tutorial

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Tutorial author: Eric Sodomka

Data Science Africa 2019 - Addis Ababa, Ethiopia

#### Mini-Contest

- Prize: 3 winners, each of 1000 Ethiopian Birr (~\$35).
- Submission Deadline: Today at ~12PM (the end of this session)
- Task: "Identify and pitch a real-world mechanism design problem that, if solved, would greatly benefit citizens of one or more countries in Africa."

## Eligibility for this Mini-Contest

- To be eligible to win the prize, you must satisfy two conditions:
  - (1) You are attending the DSA 2019 Addis Ababa summer school.
  - (2) You have requested to join the "Mechanism Design @ Data Science Africa" Facebook Group by the time the end of this session:

    goo.gl/bGFDhU

Take two minutes to join now—we will wait!

#### Basic Rules

- In order for your submission to be eligible, it must be relevant to mechanism design, and it must benefit citizens of a country in Africa.
- This contest is about **identifying problems, not solving them**. The goal is to identify a problem for which you think the tools of mechanism design might ultimately be useful. Problems before solutions.

### Plan for this session

- Brainstorming Problems [~20 minutes]
- Describe Problem and Submit [~20 minutes]
- Next steps [5 minutes]

# Brainstorming

- Navigate here: <a href="https://bit.ly/313b4Bm">https://bit.ly/313b4Bm</a>
- Areas to brainstorm:
  - Problems of particular importance
  - Problems where you (or a connection) have particular expertise
  - Problems where you (or a connection) have power/influence
  - Problems that are particularly relevant to mechanism design
- Choose 1-3 most promising areas. Submit!

### Describe Problem and Submit

- Navigate here: <a href="https://bit.ly/2Mt8H7q">https://bit.ly/2Mt8H7q</a>
- Describe one of your brainstormed areas more deeply:
  - What is the problem area?
  - Who is affected, and how badly?
  - How is this problem related to mechanism design?
- Submit!



# Next Steps

- Winners of Mini-Contest #1
  - Eric will announce winners and some finalists in the next ~12 hours.
  - Eric will post general feedback: use it to improve submissions for the next contest!

For updates, see "Mechanism Design @ Data Science Africa" Facebook Group: goo.gl/bGFDhU

## Next Steps

- Mini-Contest #2 (deadline soon—get started now!)
  - Prize: Up to 5 winners, each of 3000 Ethiopian Birr (~\$105).
  - Submission Deadline: Tomorrow (Tuesday) at 16:30.
  - Same "problem description" form: <a href="https://bit.ly/2Mt8H7q">https://bit.ly/2Mt8H7q</a>

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