Toward an Ethical Experiment

Faculty Member: Yusuke Narita

Proposal Description:

Randomized Controlled Trials (RCT) enroll hundreds of millions of subjects and involve many human lives. To respect subjects’ welfare, I propose an alternative design of RCT that I call Experiment-as-Market (EXaM). EXaM Pareto optimally randomly assigns each treatment to subjects predicted to experience better treatment effects or to subjects with stronger preferences for the treatment. EXaM is also asymptotically incentive compatible for preference elicitation. Finally, EXaM unbiasedly estimates any causal effect estimable with standard RCT. I quantify the welfare, incentive, and information properties by applying EXaM to medical and social data.

Requisite Skills and Qualifications:

This project involves many aspects (computational, econometric/statistical, empirical, and theoretical). I am looking for an RA to help with any aspect the RA is interested in. An ideal candidate is somebody who has done coursework in econometrics/statistics (especially causal inference) and theoretical microeconomics (especially market/mechanism design). Interests in clinical trials, social experiments, and web optimization (multi-armed bandit) are a big plus. Please attach a transcript with your application. Including a writing sample would be a plus though not required.

HSSRO Application Link: HSSRO Application Link

Project Type: HSSRO

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