## Developing Models to Predict Giving Behavior of Nonprofit Donors (Technical Report)

## Philanthropic Friction: Misalignments in Stakeholder Motives and Approaches

(STS Research Paper)

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by

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## **Preface**

Divergent interests between donors and the nonprofits that depend on them cause friction in the philanthropic sector. Unprecedented access to information and institutional reforms can improve philanthropic outcomes for both donors and nonprofits.

Given technological advancements and growing accessibility of data, fundraisers can harness advanced models to better target existing and prospective donors. As competition for funding among over 1.5 million American nonprofits grows fiercer in the wake of the COVID-19 pandemic, productive fundraising is necessary not only to expand programs and better serve constituents but also for mere organizational survival. Many nonprofits, including The Children's Inn at NIH (TCI), have traditionally failed to leverage available data to optimize their fundraising efforts. A 2020-2021 Systems Engineering capstone team at the University of Virginia built a series of descriptive and predictive models to help TCI identify which donors to prioritize in their outreach and how to allocate their budget across fundraising campaigns in order to maximize their expected donations.

The interests of donors, of the nonprofits they support, of the communities nonprofits serve, and of third parties often diverge, introducing frictions that compromise philanthropic efficacy. Although charity raters, crowdfunding platforms, and popular giving mechanisms such as donor-advised funds allegedly aid donors in creating positive change, they are flawed. An analysis of various philanthropic endeavors and interviews with nonprofit leaders reveal that deeper engagement with beneficiaries and evidence-based evaluation of giving alternatives can improve philanthropic efficacy.

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