ANAND SIHTHARANJAN

anandks@stanford.edu ⋄ anands29.github.io

EDUCATION

Stanford University   *2025 - 2030 (expected)*
PhD, Economics

University of California, Berkeley
PhD, Electrical Engineering & Computer Science   *2021 - 2025 (expected)*
Advisors: Claire Tomlin, Stuart Russell
GPA: 3.885
Affiliations: Berkeley AI Research, Center for Human-Compatible AI, Hybrid Systems Lab, Kavli Center for Science, Ethics and the Public
Awards & Honors: Kavli Fellowship, Berkeley AI Research Ignition Award, PIBBSS Fellowship

University of California, Berkeley
MS, Mathematics   *2025 (expected)*
GPA: 3.885

University of California, Berkeley   *2017 - 2021*
Bachelor of Arts in Computer Science
Graduated with Highest Distinction (*summa cum laude*)
GPA: 3.968
Awards & Honors: Arthur M. Hopkin Award for Electrical Engineering, URAP Summer Research Fellow, Edward Frank Kraft Award, Dean's Honor List

PUBLICATIONS

Distributional Preference Learning
Anand Siththaranjan, Cassidy Laidlaw, Dylan Hadfield-Menell. Accepted to ICLR 2024.

AI Alignment with Changing and Influenceable Reward Functions Micah Carroll, Davis Foote, Anand Siththaranjan, Stuart Russell, Anca Dragan. Accepted to ICML 2024.

On the Computational Consequences of Cost Function Design in Nonlinear Optimal Control
Tyler Westenbroek, Anand Siththaranjan, Mohsin Sarwari, Claire J. Tomlin, Shankar Sastry. Accepted to CDC 2022.

Analysing Human Models that Adapt Online
Andrea Bajcsy, Anand Siththaranjan, Claire J. Tomlin, Anca D. Dragan. Accepted to ICRA 2021.

WORKING PAPERS

When Can Communication Be Informative? (with Yuichiro Kamada)

Intent Demonstration in General-Sum Dynamic Games via Iterative Linear-Quadratic Approximations (with Jingqi Li, Somayeh Sojoudi, Claire Tomlin, Andrea Bajcsy)

Social Planning with the Replicator Dynamics (with Claire Tomlin). Revise and Resubmit at IEEE Control Systems Letters.

Multi-Modal Paired Exchange. Accepted to 36th Stony Brook Game Theory Conference.

Kidney Exchange with Multiple Donors.

WORK-IN-PROGRESS

Bargaining with Distressed Borrowers (with Manisha Padi and Arka Bandyopadhyay)

Stable Matching under Progressive Certainty

Incentive-Compatible Feedback Control (with Claire Tomlin)

Participation in Kidney Exchange (with Haluk Ergin and Quitz Valenzuela-Stookey)

Pairwise Kidney Exchange with Chains (with Haluk Ergin)

Set Invariance in Differential Games (with Claire Tomlin)

TEACHING

Algorithmic Economics   January - May 2024/2025
Econ 147/CS 177   *UC Berkeley*

Teaching Assistant for Algorithmic Economics under Professor Federico Echenique. Topics include object allocation (deterministic and random), VCG mechanisms, optimal auctions, fair division, and more.

EMPLOYMENT

Research Assistant   February 2023 -
School of Law, UC Berkeley

Working under Professor Manisha Padi on an empirical study analyzing the interactions between mortgage servicers and borrowers in distress.

Research Intern   May 2023 - August 2023
Vector Institute for Artificial Intelligence

Working under Professor Gillian Hadfield on the theory of normative infrastructure and game-theoretic models of legal orders.

PIBBSS Fellow   May 2022 - August 2022
Principles of Intelligent Behavior in Biological and Social Systems

Was accepted as a research fellow at the PIBBSS program, where I colaboarated with Professor Dylan Hadfield-Menell in analyzing limitations of reward learning from human feedback.

Reader   August 2020 - December 2020
EE 227B

Worked as a member of course staff for EE 227B, a class on convex, non-convex and robust optimization theory that normally caters to first and second year PhD students studying Electrical Engineering and Computer Science or Mechanical Engineering.

Research Assistant   May 2020 - August 2020
Hybrid Systems Lab

Worked as a research assistant within Professor Tomlin's Hybrid Systems Lab for the summer of 2020. Conducted research on synthesizing a contingency planner for safe human-robot interaction by developing a discrete-time Hamilton-Jacobi implementation for analysis of human motion predictors.

Reader   August 2019 - December 2019
EECS 127

Worked as a member of course staff for EECS 127, a class on optimization models in engineering for undergraduates and PhD students, where tasks included grading assignments for 300+ students.