CV George Charlson

Office Contact Information
Faculty of Economics
Sidgwick Avenue
Cambridge
CB3 9DD
faculty@econ.cam.ac.uk

Contact
gc556@cam.ac.uk
+447360027187
georgecharlson.com

Placement Officer
Dr. Julius Vainora
jv429@cam.ac.uk

Placement Assistant
Louise Cross
jobmarket@econ.cam.ac.uk
+44 (0)1223 335206

References

Professor Sanjeev Goyal
Cambridge Faculty of Economics
Sidgwick Avenue
Cambridge
CB3 9DD
sg472@cam.ac.uk

Professor Matt Elliott
Cambridge Faculty of Economics
Sidgwick Avenue
Cambridge
CB3 9DD
mle30@cam.ac.uk

Professor Ozan Candogan
Chicago Booth
5807 S Woodlawn Ave,
Chicago,
IL 60637
ozan.candogan@chicagobooth.edu

Associate Professor Alex Teytelboym
Oxford Economics Department
10 Manor Rd,
Oxford
OX1 3UQ
Alexander.teytelboym@economics.ox.ac.uk

Employment

Janeway Network Postdoc 2020-2023
Bye-Fellow, Christ's College, 2020-2023

Education

DPhil in Economics, University of Oxford, 2017-2020
MPhil in Economics, University of Oxford, 2012-2014
BA (Hons), Philosophy, Politics and Economics, University of Oxford, 2009-2012

Research fields

Primary: Network theory, data markets
Secondary: information design, digital economy

Research visit

Kellogg School, Northwestern, 03/2022-05/2022

Working papers

Data markets

JMP: *"Digital gold? Pricing, inequality and participation in data markets"* Janeway Institute Working Paper (2022)

I examine inequalities arising from biases brought about by the incentives and externalities present in data markets, where a data collector ultimately provides an end-service which is beneficial. Agents receive different prices for their data, which is valued according to the extent that it is representative of the data of non-participating agents. The service provider estimates the characteristics of high-cost and minority groups with less accuracy, leading to these groups receiving lower quality services on average, and lower utility in equilibrium. Data privacy policies tend to reduce such inequalities but at the cost of consumer surplus, while a subsidy strategy targeted at increasing the utility of those disadvantaged by data markets increases consumer surplus but may also widen inequality.

"Third-degree price discrimination in the age of big data" Janeway Institute Working Paper (2021)

A platform holds information on the demographics of its users and wants to maximise total surplus. The data generates a probability over which of two products a buyer prefers, with different data segmentations being more or less informative. The platform reveals segmentations of the data to two firms, one popular and one niche, preferring to reveal no information than completely revealing the consumer's type for certain. The platform can improve profits by revealing to both firms a segmentation where the niche firm is relatively popular, but still less popular than the other firm, potentially doing even better by revealing information asymmetrically. The platform has an incentive to provide more granular data in markets in which the niche firm is particularly unpopular or in which broad demographic categories are not particularly revelatory of type, suggesting that the profit associated with big data techniques differs depending on market characteristics.

"Rating the competition: seller ratings and intra-platform competition" Janeway Institute Working Paper (2021)

Product ratings are commonplace on large online platforms, like Airbnb and Amazon Marketplace. One use for these ratings is to order search results. Platform owners are able to choose the extent to which ratings can be used to determine the probability a given seller is observed by a set of buyers. Since demand is higher for high quality products, there is an incentive to increase the probability that highly-rated sellers are observed by biasing search results towards them. However, biasing search results in this way results in competition being more concentrated, reducing prices. The extent to which it is profitable to use ratings as a means of ordering search results depends on the properties of the market(s) the platform operates in.

Platforms

"In platforms we trust: misinformation on social networks in the presence of social mistrust"

We examine the effect of social trust on a network in which agents communicate with each other and information sources, changing their opinion with some probability. Agents whose peers are more likely to spread misinformation are consequently less trusting than agents whose neighbours are more informed, and therefore change their views with less probability. When echo chambers are strong, weakening them results in there being more interaction between high and low social trust agents, increasing the spread of misinformation. When echo chambers are weak, however, weakening them further reduces the differences in social trust, decreasing the asymmetries in communication and hence the probability agents are misinformed. As a result of the non-linear relationship between the strength of echo chambers and the spread of misinformation, optimal interventions in network structure depend on why agents form links in the first place.

"Searching for results: optimal platform design in a network setting" Janeway Institute Working Paper (2021)

Online platforms shape the pattern of observation between buyers and sellers. We model buyer-seller interactions as a series of bipartite graphs, which are each realised with a probability chosen by the platform owner. To maximise profit, the platform owner ensures that the size of the neighbourhood of each buyer is consistent and randomises observation across every seller. When products are vertically differentiated, the platform owner faces a trade-off between biasing observation towards high-quality products and increasing competition. The extent to which platforms highlight high-quality products depends on the characteristics of the market(s) in which they operate.

Work-in-progress

"Big data, competition and strategic location" with Ozan Candogan (Chicago Booth)

"Optimal data architectures" with Ruslan Momot (Michigan Ross) and Marat Salikhov (New Economic School)

Teaching experience

Autumn 2020-present	Fellow, Christ's College, Cambridge	Industrial Economics
Autumn 2019-2020	Lecturer, New College, Oxford	Microeconomics and Game Theory
Autumn 2017-2020	Class teacher, LMH, Worchester	Econometrics
Autumn 2017-Spring 2019	Lecturer, Harris Manchester	Microeconomics
Autumn 2017-Spring 2018	Class teacher, Masters, Oxford	Microeconomic Theory

Other employment

Economic Consultant, Oxera, August 2014-June 2017

Specialised in the economics of platforms and the film industry. Worked on projects with companies like Warner Bros, Mastercard, the British Film Institute and Dyson. Promoted in Dec 2015.

Professional activities

Referee: *International Journal of Game Theory; Journal of Economic Theory; RAND Journal of Economics*.

Organiser: Cambridge Networks Webinar (2020-2023), Cambridge INET Young Academics Network Conference (2021)

Awards

Autumn, 2017	Departmental scholarship 2017-2020, including Final Year Bursary.
Spring, 2011	Thomas Balogh Prize for Political Economy

Presentations

2022 7th Conference on Network Science and Economics, Chicago; EC Poster Session; INFORMS; Virginia Tech Economic Theory Seminar; Cambridge Theory Seminar
2021 6th Conference on Network Science and Economics, Chicago; International Industrial Organization Conference; Cambridge INET Young Academics Network Conference;

Cambridge Theory Seminar.
2020 Econometric Society Winter Meeting; Cambridge Networks Seminar
2019 Stony Brook Game Theory Festival, Stony Brook; EAYE Conference on Networks, Paris

Personal information

Citizenship: United Kingdom

Languages: English