



Collaborative Research & Innovation for Technology that Supports Social Justice

JOIN THE NETWORK. MAKE A DIFFERENCE.

INTRODUCTION

Not-Equal aims to foster collaborations and networks of interest that explore practical responses to create the conditions which enable technologies to support social justice. Not-Equal sets out to explore ways to ensure that innovations in technology not only meet social justice goals but also that social justice values are embedded in their design and implementation.

Digital innovation is transforming social relations, the service economy and public services in significant ways. As government bodies, large companies, and private sectors strive to understand and develop ethical guidelines for the design and implementation of new and emergent technologies. These concerns have raised more profound questions around the potential for socio-technical systems to enable equity and social justice¹.

Ethics is a fundamental part of social justice. Social justice as an interventionist approach, actively seeks to organise societies' resources and structures to create a fairer social order that can work for the many rather than the few. Justice and fairness, however, are contested and context-specific concepts. Different disciplines, perspectives and communities have a different understanding of what is just and fair, depending on values and principles. What is considered (un)just changes over time and according to geographies and socio-technical transformations. This requires continuous inspection and inquiry as to the values and principles we encode and reproduce in digital systems and services. This is important because these digital systems and services enact, enable and put into practice the different conceptions of democracy, citizenship and the services that run our cities.

We call for new explorations that open new technological directions, new approaches and new ways to model and design socio-technical systems that help meet social aspirations and goals. Developing these requires interdisciplinary collaborations as well as collaborations between civic institutions, grassroots groups and R&D labs.

This document offers topics and guidance to develop collaborative research in response to Not-Equal challenge areas: Algorithmic Social Justice; Digital Security for All; Fairer Future for Businesses and Workforces.













NOT-EQUAL CHALLENGES

AREAS.

Algorithmic Social Justice

Algorithmic Social Justice is focused on co-developing responses to the challenges and potential posed by the new data economy. This includes Machine Learning systems and data processing used in digital services and decision-making that affect us all; from the management of public services, decision in healthcare and the criminal justice system, distribution of public goods, and the organisation of our personal lives. The challenge is; to democratise and more equitably distribute the benefits generated by data access and control, to guestion the algorithmic characterisations of fairness and, how different notions of social justice can be operationalized in socio-technical systems.

Digital Security for All

Digital Security for All explores how we can co-create a digital security that is more inclusive and that recognises the wider costs of exclusion. Security not only offers protection but, if designed well, also offers freedom and empowerment. Whilst security is important in order to protect from harm— a protection-only approach focuses mainly on principles of control, mistrust and secrecy. We can instead understand protection as part of a wider picture of enablement, which also affords people to live free from fear. This points to an innovative way to design and implement security-one that includes rather than excludes. The challenge is to design and configure a digital security that is more responsive to issues of agency, capability, and socioeconomics; and that promotes principles of trust, care and collaboration.

Fairer Futures for Businesses and Workforces

Fairer Futures for Businesses and Workforces examines how economic forces coupled with network opportunities are creating new challenges to society as markets go global; jobs become "gigs"; and worker protections seem beyond the reach of these individualized service-provision arrangements. Terms such as the sharing economy suggest a benign, citizen-led cooperation facilitated by digital technology, but, in practice, they often involve corporations exercising control reminiscent of the worst excesses of the Industrial Revolution. The challenge is to re-envisage how digital technology can offer fresh patterns for processes and systems to realise equity in economic opportunities for all.

AVOIDING HARM

How can we avoid or mitigate harmful consequences in the use and deployment of new and emergent technologies?

What kind of tools and techniques can help those designing new systems to ensure social justice?

What kind of socio-technical systems can help address issues of social justice in society?



POSITIVE ACTION

TOPICS FOR COLLABORATIVE RESPONSES

We are looking for imaginative and experimental collaborative research responses to the following topics across challenges areas.

Responses might include: radical reconfigurations of existing socio-technical systems; new approaches to systems design and implementation; new tools and techniques to support technology designers and users. Responses should be embedded in the realities of broader social context (e.g. domains, processes, governance and policies bound up with a digital system).







RECOGNITION:

Working with social issues, not reproducing them

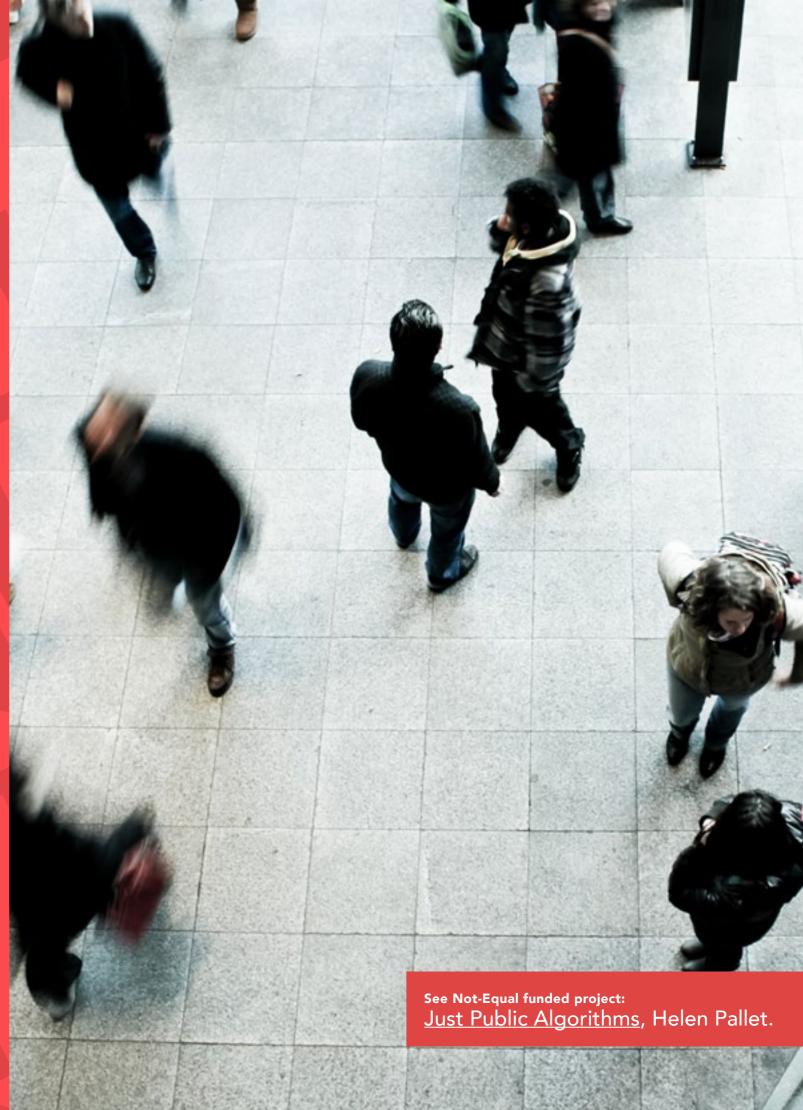
The identification of assumptions, labour exploitation, harm and social biases² in any socio-technical system requires historical, contextual and pragmatic understanding of the social issues at stake. Diverse voices and expertise in decision-making arenas where technologies are developed and implemented are necessary to allow deep critical contextual understanding. Collaborative processes that aim to design and implement these systems, and related evaluative frameworks are challenging due to the complexity of both the technical systems and the issues they are developed to tackle and engage with (e.g. the ways issues of race, gender and class intersect in complex ways and are tightly coupled with economic injustice).

WE ARE CALLING FOR:

8

We are calling for new processes and frameworks that enable developers, adopters and beneficiaries to engage with, evaluate and/or contest the way systems; encode particular values, replicate and increase social bias and other social justice issues³ or are able to foreground social problems⁴. We are calling for tools and mechanisms that innovate workflow processes and working configurations in security and Machine Learning so as to identify assumptions, negative impact and better document data provenance. This might include new tools and processes that enable practitioners from diverse backgrounds and expertise to collaborate more effectively and meaningfully.

² Julia Powels. 2018. The Seductive Diversion of 'Solving' Bias in Artificial Intelligence: https://rb.gy/mfkdvc ³Sasha Costanza-Chock. 2018. Design Justice: Towards an Intersectional Feminist Framework for Design Theory and Practice: https://rb.gy/ad0ao0 Rediet Abebe et al. 2019. Roles for Computing in Social Change. https://arxiv.org/abs/1912.04883





RE-DISTRIBUTION:

Prioritising people's needs, not profit

Everyone should be equally entitled to realise socio-economic benefits afforded by the new data economy and digital services; where 'benefiting from' entails affordability, access, skills and the knowledge necessary to achieve such benefits. The designs of most socio-technical systems are based on economic models that prioritise profit, rather than people. In this sense, technologies are exploitative or carrying assumptions about what might be beneficial or what might be desirable. There are other socio-economic models and measures, which instead prioritise meeting the needs of people⁵. These models or a combination of alternative economic models⁶ from the mainstream neoliberal one, can offer more equitable distributional patterns of socio-economic benefits for civics and workforces.

WE ARE CALLING FOR:

Beyond creating novel interfaces and interactive structures to improve fairness at work, good design can help enterprises with an ethical basis, such as cooperatives, flourish by supporting them in competition with the commercial giants. When new less profit motivated economic models are adopted⁷, there may be no one with technical skills in the team and no money to buy them in. We are calling for new approaches that explore the design and/or application of alternative economic models to socio-technical systems that can facilitate the success of enterprises with an ethical basis.

⁵ Social and Solidarity Economy: Economy and Employment, Digital City and International Relations: https://rb.gy/bsyq4r 0 ⁶ Ha-Joon Chang. 2016. Economics is for Everyone: https://rb.gy/ktrkhp ⁷Commons Transitions: https://rb.gy/kh8wih and Platform Cooperativism Consortium: https://rb.gy/v6kfqc



ENABLEMENT & RADICAL

Empowering people to action, not restraining them

We can distribute power by creating the conditions necessary for people to identify their needs and collectively action responses that enable them to lead lives they value. More than consumers, voters and community members, citizens are and can be co-creators of public goods and services⁸. In this view, the focus is on collectives and collective action, rather than individuals, since it recognises that things, people and ideas in aggregate can affect the development of change. Enabling communities to organise and co-create responses and digital services that affect their lives requires radical trust on the part of institutions towards communities. There are examples of this applied to local politics⁹ (e.g. participatory budgeting), but these have rarely been applied to digital security and/or data-driven decision-making processes.

WE ARE CALLING FOR:

We are calling for new approaches to enable individual and collective digital security through radical trust. These approaches might look at the security specifications that enable people to realise benefits in day-to-day life. We are calling for innovative open-data tools and socio-technical systems to enable the different beneficiaries of data-driven decision-making processes, to gain equitable decisional power; and/or that can be put to use for civic campaigns (e.g. tools at the services of civic institutions, civics and grassroots groups, third sector and NGO organisations).

⁸ Harry Boyte, 2008. Civic Driven Change and Developmental Democracy: https://rb.gy/dl2re7 ⁹ George Monbiot. 2019. There is an antidote to demagoguery – it's called political rewilding. https://rb.gy/0agen8 12



See Not-Equal funded project: CinCity, Artemis Skarlatidou.



PROACTIVE RESILIENCE & REPARATION:

PIGS

Diversifying pathways to sustainability, not weakening them

Current security and sharing economy systems have proved to weaken the social fabric—e.g. increasing precariat, socio-cultural vulnerabilities, etc. In a time prone to socio-political and financial crises, and natural disasters-many have to develop sustainable, resilient societies¹¹. This means building and supporting socio-technical systems that are able to cope with pressure and local failures without collapsing. Rather than focusing on defence mechanisms to failure, a proactive approach to resilience sets out to diversify and creatively experiment with what might be possible and in which ways socio-technical systems can be made sustainable.

WE ARE CALLING FOR:

We are calling for new proactive approaches to the development of resilient socio-technical systems across our challenge areas. These are systems that, for example, help develop human capacities; strengthen the social fabric through supporting social solidarity; and provide opportunities for people to add positively to the common resources of the planet. We are looking for approaches and activities that experiment with repair, where harm - having already arisen -





See Not-Equal funded project: Co-designing a Sustainable Food Justice System with Blockchain Futures, Sara Heitlinger.

ACCOUNTABILITY & CARE: Making duties of care a collective affair, not privatising them

Holding responsible those who develop and implement harmful policies and socio-technical applications is often a privatised and individualised affair— as in the case of single whistleblowers. Yet, the development and implementation of sophisticated systems involve many people in different positions of vulnerability, with interdependent relations. In this respect accountability must be understood as a collective endeavour where distinctive parties may have different capacities for action.

For example, often the engineers designing and developing a socio-technical system remain unaware of how it will ultimately be used¹¹; in other cases, users might not fully understand what the technology can do or potential significant harms that this may cause.

WE ARE CALLING FOR:

We call for new explorations of collective responsibilities in digital security; these are explorations that, for example, question the ordinary framing of security issues and harms and instead look to strengthen systems of care. We are also calling for new approaches to the exploration of collective responsibility in machinelearning and digital services. This might include processes and systems that enable technology workers to navigate, organize and contest unethical practices in their workplaces or that helps them with making ethical choices in their day-today working practices through novel systems of support.





See Not-Equal funded project: <u>Creating and Understanding</u> <u>CyberGuardians in Communities</u>, James Nicholson.

NOTECUAL https://not-equal.tech

, +44 (0) 191 208 8268 notequal@newcastle.ac.uk

Not-Equal Network+ Open Lab, Floor 1 Urban Sciences Building Newcastle Helix NE5 4TG