

Existing Initiatives' In-House Technical Capabilities

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Abstract

We drew on mapping exercises conducted by the Partnership for Countering Influence Operations,¹ and Disinfo Cloud,² to identify 84 initiatives whose work focused on analysing or understanding the information environment. Upon finding contact information, we emailed 52 of these bodies asking recipients to answer four questions about their engineering and data science capabilities. We received responses for 27 initiatives, eight of which³ were also included in, "A survey of public oriented organisations analysing social media disinformation"

We found that 41% of organisations did not have dedicated in-house data science and 67% did not have engineering support. However, groups did report finding it slightly easier to obtain data science support than engineering support. Six respondents, who did not have dedicated support, reported that they could draw on capacity from within their larger organisation or team to provide data analysis support, while only four respondents said they could do the same for engineering.

¹Victoria Smith, "Mapping Worldwide Initiative to Counter Influence Operations, " Carnegie Endowment for International Peace, December 14, 2020,

https://drive.google.com/file/d/1m7nrbCRDiUwSAOomi-U2HTU4WSCqDdqD/view?usp=sharing

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https://carnegieendowment.org/2020/12/14/mapping-worldwide-initiatives-to-counter-influence-operations-pub-834

² Disinfo Cloud, "Tracking Propaganda and Disinformation," https://www.disinfocloud.com

³ The eight mentioned are: ASPI; ClemsonHub; CSMaP; DFRLab; Graphika; Institute for Strategic Dialogue; Stanford Internet Observatory; and University of Washington's Center for an Informed Public. Darren L. Linvill & Patrick L. Warren, "A Survey of Public Oriented Organisations Analysing Social-Media Disinformation," 2022,

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Executive Summary

- 1. We gathered publicly available information on the type and quantity of in-house engineering and data science support within 84 initiatives whose work focused on analysing or researching the information environment.
- 2. We identified contact details for 52 initiatives, emailed them a brief survey, and received responses for 27 initiatives.
- 3. 16 respondents (59%) reported that they did not currently have dedicated in-house engineering capabilities. Two said they could draw on their team or wider organisation for engineering when required.
- 4. 18 respondents (67%) reported that they did not currently have dedicated in-house data science support. Six respondents could draw on data science contributions from their faculty, wider organisation, or external partners and consultants.
- 5. 20 respondents reported access to quantitative analysis support. Of these, sixteen relied on support from their university faculty, including faculty staff, Ph.D. students, post-doctoral researchers, or from within their existing team; Three used consultants or external partners⁴ and two could access the support from their wider organisation.
- 6. Skilled personnel was the most frequently cited enabler that was difficult to access, primarily because of funding constraints. Restricted access to data and funding, in general, were the next most cited difficult to access enablers.
- 7. Development of infrastructure and new tools is expensive and can be difficult to justify when funding is restricted to short-term projects.
- 8. Of the 27 responses received, 44% came from academia, 41% from civil society, 11% from tech companies, and only one response came from a government or intergovernmental initiative.
- 9. Three-quarters (74%) of the responses were from initiatives based in the United States. Two respondents were based in the UK and one each from Australia, Belgium, Brazil, Canada, and Slovakia.

Introduction

This review of in-house technical capabilities is part of an effort to evaluate the potential of the Institute for Research on the Information Environment (IRIE). IRIE is an initiative aiming to develop a shared scientific infrastructure to support policy-relevant research on the information environment's impact on democratic deliberation, politics, and public health. To assess the requirements for this new institute, we want to better understand existing institutions' capabilities and gaps. To do this, we identified a subset of 84 organisations spanning academia, civil society, government, and tech, whose work most closely aligned with the types of activities that IRIE may support or undertake. We contacted 52 of these identified organisations by email with a short survey.

Our responses highlighted a field adapting to overcome constraints including a lack of access to data, funding, and competition for skilled personnel. Some respondents described an increasing focus on qualitative, rather than quantitative, analysis, substituting requirements for bulk data

⁴ One respondent reported having access to support from within their wider team and paid consultants.

collection and analysis with targeted interviews, and manual content analysis. It is unclear to what extent this change was by choice or due to data analysis constraints.

Two of our responses were from tech companies, with greater engineering and data science capabilities than most non-profit initiatives. They shared their responses on the condition that they would remain anonymous, and the details of their team composition would not be made public.

Methodology

We drew on sources including the Partnership for Countering Influence Operations' initiative mapping exercise conducted in 2020⁵ and Disinfo Cloud⁶ to identify a subset of 84 organisations whose work focused on analysing or understanding the information environment. We reviewed these organisations' websites to understand their geographic location, staffing levels, focus of work, and points of contact. Information published about work and staffing levels varied significantly, so it was therefore difficult to use this information to assess capabilities both within and between initiatives.

Four of the organisations appeared to be no longer operational:

- MIT's Center for Civic Media closed at the end of 2020;
- Oxford University's Computational Propaganda Project's funding ended in 2021;
- Social Science One is closed, although it maintains a website; and
- Harmony Labs' Project Ratio now appears in Harmony Labs' archive of past work.

The extent of independent and dedicated resources was unclear for two of the 84 initiatives:

- The Ethics and Governance of Artificial Intelligence Initiative, a hybrid research effort and philanthropic fund run by MIT Media Lab, and the Berkman Klein Center for Internet and Society at Harvard University; and
- NYC Media Lab, which is a consortium that fosters collaboration between universities and the private sector.

During this process, we used open-source research and our team's personal networks to identify contact details for 52 organisations. We emailed to ask recipients to answer the following:

- 1. Do you have dedicated engineering support? If so, approximately how many full-time employee (FTE) equivalents do you have?
- 2. Do you have dedicated data science support? If so, approximately how many FTE equivalents do you have?
- 3. If you do not have dedicated support, how do you execute the quantitative analytic tasks necessary for your work (e.g., post-docs, graduate students, etc.)?
- 4. What are the key technical/engineering enablers you find hard to access (e.g., machine translation, personnel to work on APIs, etc.)?

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⁵ Smith, "Mapping Worldwide Initiative."

⁶ Disinfo Cloud, "Tracking Propaganda."

In total, we received 28 responses.

Overview of Survey Responses

Engineering & Data Science Support

Of the 27 responses, 16 (59%) reported that they did not currently have dedicated in-house engineering support. However, of these, three could access engineering support if necessary:

- One noted that while they did not have dedicated engineering support, their team had a mix of skill sets so they could collectively build the infrastructure needed;
- One respondent said that their parent organisation had engineers to provide additional support for specific projects; and
- One organisation could access support through external partners.

One initiative that does not currently have any dedicated engineering support said there were plans to recruit two to three engineers in the medium term.

Eleven respondents reported some level of dedicated engineering support:

- One respondent had less than one full-time engineer;
- Five reported one full-time engineer. Of those five, one planned to hire a second; another said they could also draw on the support of external partners as required;
- One had two full-time engineers;
- Two had three dedicated full-time engineers; and
- From the two tech companies, Graphika reported 14, and Jigsaw 35, full-time engineers on staff.

In terms of dedicated data science support, 18 (67%) organisations reported that they did not have dedicated support. However, of these:

- One hoped to recruit a data scientist in the short term;
- Five said that additional support could be found in their faculty or team if required;
- Two had access to data science skills in their wider organisation; and Another could access support from external partners.

Six of these organisations that do not have dedicated data science support have developed ways to access it:

- One University reported hiring a data science consultant by the hour to fulfill specific tasks;
- One initiative could either hire a data science consultant or access support through an organisational partnership;
- Another initiative said they had an ongoing organisational partnership which provided them with support which varied on a project-by-project basis;
- A large organisation said that while there was no dedicated support, the organisation had about 10 full time data scientists, who were not linked to any specific projects but could provide support when required;

• Finally, one university said that all members of their faculty had some level of sophistication with statistics and data science, while another relied on Ph.D. and postgraduate students to provide support as required.

Of the initiatives with in-house data scientists, the team size varied.

- Five entities reported the dedicated contributions of one full-time data scientist. One of these five organisations hoped to recruit a second. Another noted that they could also draw on the skills of existing team members. Finally, one initiative reported that their one data scientist spent "most of their time in meetings, thus the organisation only had about 10% of a full-time data scientist." It is unclear whether this situation was because the organisation does not need full-time support.
- One initiative shared that they had the support of two data scientists on their team.
- The tech companies had the most data science support. One company reported seven data scientists and the other three.
- Finally, two groups reported that their access to data science support varied according to the work they were undertaking. One organisation explained that they paid computer scientists by the hour as needed. Another organisation received data science support through a strategic partnership with a tech company on a project-by-project basis.

Executing Quantitative Analysis

Twenty-three respondents answered the question asking how their initiative executes the quantitative analysis tasks necessary for their work:

- Sixteen relied on support from their university faculty, including faculty staff, Ph.D. students post-doctoral researchers, or from within their existing team;
- Three used external partners or consultants:⁷
- Two reported using staff from other areas of their wider organisation; and
- Finally, three respondents said they did not do quantitative analysis.

Most respondents did not specify exactly how many staff members with quantitative analysis skills they had access to. However, three of them were more specific:

- Stanford Internet Observatory said they had access to one technical postdoctoral supplemented with undergraduate and graduate student research assistants who work on a part-time basis.
- CSMaP said they have 5 full-time postdocs who have computational social science backgrounds and were, for the most part, able to perform the quantitative analytics tasks necessary.
- DFRLab said that each of the c. 20 FTEs on their research team was capable of quantitative analysis. They added that "with very few exceptions, most of (these 20 FTEs) would categorise themselves as data journalists or online researchers. The vast majority of our quantitative analysis is conducted using third-party tools with varying access to platform APIs. On a few occasions, we've built our own tools. On more occasions, we've built or curated our own data sets for further analysis or comprehensive analysis on a given topic."

⁷ One respondent reported access to support from within their team and from paid consultants

Difficult to Access Technical and Engineering Enablers

Many respondents described difficulty accessing more than one technical or engineering enabler. Access to skilled personnel was the most frequently cited, followed by data access and general funding constraints.

Personnel issues included:

- Personnel to work on APIs or develop alternatives to APIs;
- Personnel to develop tools to better analyse and visualise data; and
- Personnel willing to take on repetitive, lower-skilled tasks.

Some of the reasons cited for personnel issues were:

- Challenges of recruiting and retaining skilled labour, given competitive salaries within the private sector;
- Funding limitations restricting the number of staff that can be recruited; and
- Limited capacity to train the required number of students/staff.

The next most frequently cited difficulties were data access and general funding constraints, both cited by seven respondents. Data access constraints included:

- Reliance on limited data made available through second or third parties, such as via platform APIs; and
- Not meeting the requirements for certain platform data

In ongoing consultations in the counter-influence community since 2019, researchers have frequently cited access to data as an issue. However, data access likely means different things to different researchers. Some, who can store and analyse bulk data at scale, want unrestricted access to large volumes of data. However, this access incurs several costs: funds and staff to build and maintain the infrastructure to store and process the data, as well as the technologies to analyse it, such as natural language processing, image/video analysis, machine translation or data visualisation. For other researchers, data access means access to better quality data than they currently can access; this could be data that they can search and filter to narrow their sample size, or that is structured to help them better compare data collected from different platforms. For many of these issues, until researchers and platforms can find a way to resolve the tension between user privacy and data access, likely many of the issues relating to data will not be satisfactorily resolved.

The lack of funding also affected respondents' work, in addition to staff recruitment and retention. Respondents also mentioned the difficulty of building and maintaining infrastructure in an environment where funding is project-based. Other respondents cited the costs of specialised technologies, like machine translation, which they said can be prohibitively expensive.

Other difficult enablers to access were automated image analysis, cited by two respondents, and machine translation, video analytics, training data sets, standardised reporting for threat sharing, and natural language programming in central European languages, which were all cited once.

One respondent found no enablers difficult to access, while two explained that the question did not apply to their work. Two respondents emphasised qualitative research methods rather than quantitative analysis in their work. One group stressed the need to recognize the importance of qualitative approaches and that civil society researchers may need support in this area, including personnel to code, shared codebooks, or strategies to minimise the negative impacts of reviewing harmful content. CDT reported that their main consideration for using quantitative versus qualitative methods was implementing the best methods to address the chosen research question.

Finally, one respondent highlighted bureaucratic obstacles as a significant impediment to international cooperation on these issues, even among allies, but did not provide additional details.

Overview of Initiatives

Out of the 84 bodies originally identified, we classed 38% as academic, 43% civil society, 11% technology companies, 5% government or intergovernmental, and 2% media.

Of the 28 responses received, 44% came from academia, 41% civil society, 11% tech, and one response from a government or intergovernmental group. Three-quarters (74%) of the responses were from initiatives based in the United States. Two respondents were based in the UK and one each from Australia, Belgium, Brazil, Canada, and Slovakia.

Conclusion

Our research found that most of the initiatives that responded to the survey did not have in-house engineering or data science support, but it was easier for these groups to find data science, rather than engineering, support for ad-hoc requirements.

Financial restrictions also have a significant impact on a range of issues in the community. Competitive salaries in the private sector make staff recruitment and retention difficult. Development of infrastructure and new tools is expensive and can be difficult to justify when funding is restricted to short-term projects. Access to data, a frequent refrain among the counter-influence operations community, was also raised as an issue by several respondents in this survey. However, ongoing consultations led by the PCIO have found that different researchers can mean different things when describing data access; some want quantity, while others want access to better quality data.

Two of the initiatives stated they favour qualitative research questions rather than quantitative analysis. While one respondent said the choice between adopting quantitative or qualitative research methods was driven by the chosen research question, they did concede that quantitative research methods could incur additional costs related to the secure and ethical collection and retention of large volumes of data.

Appendix A.1 Codebook

Variable	Description
Host Organisation	Name of the Parent organisation to which the initiative belongs (if applicable). For example, the name of a university or think tank.
Initiative Name	Name of the Initiative. This could be an initiative in its own right, a university department, or project housed at a think tank.
Organisation Type	Academia – A university department or project Civil Society – Think Tanks and other non-governmental organisations Government & Intergovernmental – Run by a local or national government or housed at an intergovernmental organisation such as the UN or EU. Tech – A company such as a platform or data analysis company
Country	Geographic location of the initiative
Engineering Support (FTEs)	Number of in-house full-time employees (FTEs), answers provided by survey respondents
Data Science Support (FTEs)	Number of in-house FTEs, answers provided by survey respondents
How do you execute the quantitative analytics tasks necessary for your work?	Answers provided by survey respondents
What are the key technical/engineering enablers you find hard to access	Answers provided by survey respondents
Additional Information	Answers provided by survey respondents

A2: Survey Responses

				Survey Respo	nses			
Host Organisation	Initiative Name	Organisation Type	Country	Engineering support (FTEs)	Data science support (FTEs)	how do you execute the quantitative analytics tasks necessary for your work	What are the key technical/ engineering enablers you find hard to access	Additional information
Harvard University	Berkman Klein Center for Internet & Society	Academia	USA	2	0 (1 FTE in the past)	Fellows and faculty arrange for their own support or have the skills themselves.	Data access, as web scraping yields less and less these days	
University of Washington	Center for an Informed Public	Academia	USA	Plans to add a full-time software engineer in the coming months.	1 (a senior data science engineer, and plan to hire a junior)	Data science work is carried out by PhD students and postdoctoral researchers as part of their research.	The capacity to assist external researchers in accessing our data and using it for their projects. This is a goal of our Center, but hard to sustain.	Difficult to resource repetitive, lower-tech tasks than more exciting, data science. Need to hire external support for the former.
Carnegie Mellon University	Center for Computation al Analysis of Social and Organization al Systems (CASOS)	Academia	USA	1	1	Supplemented with graduate students and postdocs	Personnel to work on APIs Automated image analysis	
Stanford University	Internet Observatory	Academia	USA	1	0	One technical postdoctoral scholar supplemented with undergraduate and graduate	We would benefit from stronger dedicated data science support.	

						student research assistants who work on a part-time basis.	To date we have not been prevented from doing our work but it has been slowed because of reduced technical support. We are constantly working to train more students for our projects.	
New York University	Center for Social Media and Politics (CSMaP)	Academia	USA	who work on data ingestion and storage, building software packages, and providing engineering support on a project-by-project basis.	who is currently working on our independently recruited panel.	In addition to these four FTEs, we have 6 full-time postdocs who have computational social science backgrounds and are, for the most part, able to perform the quantitative analytics tasks necessary for our research. Our affiliated PhD students also have quantitative backgrounds, ranging from the social sciences to data and computer science.	Currently, there are no enablers we find hard to access. Our technical issues are the product of general accessibility limitations, such as limited APIs, increasingly stringent access requirements, lack of data, etc. However, these are not problems that greater internal support could solve.	
University of Texas	Center for Media Engagement (CME)	Academia	USA	0	O Variable Dedicated data science support from computer scientists that	Post-docs, graduate students and professors execute the quantitative analysis. This is largely necessary because our university rates for hourly paid consultant are not competitive in	All of those due to a mix of lack of dedicated financial resources specifically for that as well as the	

					we hire as hourly paid workers	the market for computer scientists.	mentioned competition over people able to work with that.	
Atlantic Council	Digital Forensics Research Lab (DFR Lab)	Civil Society	USA	We have at least three FTE on the research team capable of providing engineering support on various tasks, though they would surely not identify themselves as engineers or hard core data scientists.	0	Each of our approximately 20 FTE on our research team is capable of quantitative analysis. Most of our quantitative analysis is conducted using third party tools with varying access to platform APIs. We've built our own tools, or we've built or curated our own data sets for further analysis or comprehensive analysis on a given topic.	Part of the reason we use third party tools is so that we don't own all the data privacy liability. That said, the approach makes us vulnerable to market conditions for those tools as well as what platforms decide to make availability (like API access for those tools or topical data directly to us).	
	Graphika	Tech	USA	14	7		Machine translation, image analytics, video analytics, training data sets, standardised formats for threat sharing	Do not make responses public
Aspen Institute	Commission on Information Disorder	Civil Society	USA	0	0	We don't do that kind of work.	We don't do that kind of work.	

Australian Strategic Policy Institute (ASPI)	Civil Society	Australia	We have a mix of skilled and adaptable individuals that collectively are able to build out the infrastructur e needed. Core team of four supplemente d with expertise from across ASPI (Chinese linguists, political analysts etc), and at times contracted in support.	we have built a team with a diversity of skills, including data science (without having a position entitled 'data scientist'). Data science is certainly an element of our work. Currently we have one team member who best matches this description.	We have developed individuals where we have talent spotted early career researchers with foundational skills (in eg statistics/quantitative research methods).	Two challenges here – (1) building bespoke infrastructure that is sustainable in an environment where funding is project-based, and (2) competing in the highly competitive marketplace for data science hires.	
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I	Center for Democracy & Technology (CDT)	Civil Society	USA	Much of our research has not required these skills We have also decided against developing and updating software tools that are relevant to our work because of the resources needed to maintain them	We do have at least 1 person of the team with data science skills. However, they haven't used those skills for their work. Again, this is because we have designed our research and advocacy to rely on other forms of research expertise. This includes qualitative methods, survey methods, statistical analysis, and most recently UX/UI and design research methods.	We currently have some quantitative (e.g., statistical analysis) skills in house that we use. In addition, we work with consultants. In other cases, we have worked with consultants to conduct similar work. We also work with interns, Fellows, grad-students, and others from time to time who may also have these skills. We do have several computer scientists and other staff with technical training on the team (including PhDs). Their work often involves adding technical analysis to our research and advocacy. Thus, although we have certain technical skills on our team those are focused on analysis to support our research and advocacy as opposed to engineering or data science problems.	Access to data is the biggest challenge for us so far. Even where data from social media companies is made available to researchers we may not always qualify as a civil society organization. Where we need additional skills we can identify partners and consultants but that will come at a cost.	I think it's important to highlight the utility of qualitative research methods. We should recognize the importance of qualitative approaches and that researchers may need support including personnel to work on coding, shared codebooks, strategies to minimize the negative impacts of reviewing harmful content, etc. Willing to be interviewed if required
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Data & Society Research Institute	Disinformatio n Action Lab	Civil Society	USA	0	0	Our research made use of our in-house operations and tech support staff, but did not otherwise make use of engineering or data science support, and was focused on more qualitative research.	DAL was convened temporarily on a limited-term grant to aid on communications threats around the 2020 US census. Since then, we have wound down the project and will be publishing final findings this year. However, this does mean that we are not	
							that we are not currently arranging any long term support for the project.	

East Stratcom Task Force	EUvsDisinfo	Government & Intergovernme ntal	Belgium	We have one FTE equivalent data engineer and software programmer assisting our operation	<1 We have one data scientist (me), but he spends most of his time in meetings and with emails. So I would put that currently to 0.1 FTE	Same as (2), though our bigger team of digital forensics/OSINT analysts all have some basic data visualisation capacities. Our operation is still comparatively small, and more advanced in case-study based OSINT investigations using digital forensics. The data science component is in its very early stages. We are scaling up our operation, so the above might change significantly over the next 1-2 years.	Machine translation is actually an issue as it tends to be too expensive. Bigger issue is API access to social media platforms as we're considered to be a quasi-government institution.	Bureaucratic roadblocks are significant and impeding systematic international cooperation even amongst allies and EU Member States.
	GLOBSEC Policy Institute	Civil Society	Slovakia	0	0	In case we deal with more complex issues, we look for partners with such skills. For quick, one-time tasks, we hire a data science consultant. For more complex issues, we partner with organisations/institutions/universities, both in Slovakia and across Europe.	NLP in Central European languages.	

Institute for Strategic Dialogue (ISD)	Civil Society	UK	0	O Variable We do have dedicated data science support, provided through a strategic partnership that we maintain with CASM Technology. Resourcing varies on a project-by-proje ct basis.	The ISD team also contains members of staff that are capable of performing quantitative analysis. A number of team members are also proficient in conducting quantitative analysis using programmes like Excel and SPSS (depending on the needs), and visualising data with tools like Gephi and Tableau. Most of these staff members sit in ISD's Digital Analysis Unit, which focuses on developing online research methodologies and training staff to implement them.	We don't often have limits or issues here. In addition to the partnership with CASM, we also retain PC Consultants as a tech support, who have helped us with some discrete technical tasks previously.	
Instituto Igarapé	Civil Society	Brazil	1 The team also draws on support from private partners (pro bono or subsidised rates) on demand.	They are involved in a variety of activities, mostly in relation to powering predictive analytics and building data lakes.	The Igarape Institute also works with academic, non-governmental and private partners on certain "higher-level" problem sets. For example, the Institute has worked with partners at Oxford, Harvard, PUC and FGV on some quantitative studies. Likewise, for fairness testing, the Institute works with Quantil in Colombia.	The primary challenge is that large social media companies have routinely head-hunted our staff or outcompeted salaries. As for technical issues, we have found the required skill sets to meet our needs.	

National Endowment for Democracy	International Forum for Democratic Studies	Civil Society	USA	0	0	At the Forum, my office, the research arm of NED, is probably too small to have a full-time, highly technical support person on our Infospace Integrity portfolio. We've hired more with an eye to bridging research and action, and being a force multiplier, convener, and publisher for NED and its broader network.	As a funder, NED doesn't do a great job of equipping small-ball counter-disinfo orgs with technical support and know-how. We fund much of NDI and IRI's work in this area, and they, in turn, do that type of equipping and support for their own implementers and make much of their work available to other local implementers that NED and others fund.	
	Jigsaw	Tech	USA	35	3	We also partner with academics and engineers/data scientists across Google.	N/A	Request not to make Jigsaw's team composition public

RAND Corporation	Countering Truth Decay	Tech	USA	Variable RAND in total has probably 80+ FTE of engineers, but none of them are "dedicated" to any program, project, or initiative, but instead choose to work on projects as they emerge	Variable Maybe 10 FTE of data scientists RAND-wide, but again, not dedicated to any specific program or initiative	Finding the right personnel in RAND's internal labour market. Data collection and analysis is conducted by the project teams using a mix of research assistants, graduate students, and researchers. RAND has access to some text analysis and content analysis software as well as support for other machine learning tools.	Barriers are more on the data access side than on the technical enablers side, There are still big gaps in the types of data and datasets that are publicly available and usable for analysis. This could include data from other platforms or social media use data that could be linked with other public data sources like the CPS or household surveys.	Jennifer can be contacted with follow up questions
Georgetown University	Institute for the Study of Diplomacy	Academia	USA	0	0	We don't do much quantitative analysis, but if/when we do, it is tasked out to a graduate research assistant.		
Ryerson University	Social Media Lab	Academia	Canada	0	0	postdocs, graduate and undergraduate students	access to data, and access to funding	

George Washington University	Misinformati on/Disinform ation Lab (Institute for Data, Democracy, and Politics)	Academia	USA	0 we seek out grants or collaboration s with engineering researchers	O All participants have some level of sophistication with statistics and data science.	N/A		'Will these responses be public or confidential? Will I have access to the resulting report?'
Clemson University	Media Forensics Hub	Academia	USA	<1 approximatel y 1/8 FTE	No, but again we hope to hire this support in the near term.	Faculty time. It is far from ideal and a poor application of resources.	Personnel to pull down data from APIs. Personnel to develop processes for accessing data where APIs are not an option. Personnel to develop tools to better analyse and visualise data. Creation of coherent work flows which apply faculty time optimally.	
Northeastern University	Research Infrastructur e Project	Academia	USA	0 But, in the medium run we'll have 2-3 people on the engineering side (not counting the institutional support we'll get for some	oroughly the same number of people (2-3) in the medium term			

				of this from IT services)				
Oxford University	Oxford Internet Institute	Academia	UK	0	0	2 post-doctoral researchers, 4 post-graduate level researchers.		
Brookings Institution	AI and Emerging Technologies	Civil Society	USA	0	1		Personnel	
Carnegie Endowment for International Peace	Partnership for Countering Influence Operations	Civil Society	USA	0	0			