

Below is a list of everyone who has submitted information to the Match Making Form

Name	email	Research Expertise	Proposed Contribution	Website	CV or Biosketch
Flavia C D Andrade	fandrade@illinois.edu		Many aspects of the COVID-19 require knowledge about demography (e.g. age and sex patterns; mortality), social disparities (i.e., access to healthcare, immigration status and testing), and public health. I have expertise in these areas that can be helpful for developing projects. However, I do not have training in the methods expected in the proposal, so I would not be in a position to be a PI, but can contribute to one.	https://forms.illinois.edu/fileAuth/137149_Q4_date_20200406_id_318371.docx	
Kevin Tan	kevintan@illinois.edu	I am interested in developing a research project on studying the social and emotional impacts on K-12 students, teachers, and families. I am not sure how and where to start but looking for potential collaborators. I'm happy to serve as PI/Co-PI. It probably fits under this topic for research award: Improving societal resilience in response to the spread of COVID-19 Pandemic	I will be able to provide expertise on social and emotional development of young people and families. I have a number of pre-existing projects in our local community.		https://forms.illinois.edu/fileAuth/37029_Q4_date_20200406_id_318375.pdf
Leyi Wang	leyiwang@illinois.edu	data analysis for covid-19 virus sequence	I am veterinary virologist and our lab is the first to detect covid-19 in tigers from bronx zoo. I can provide my expertise to another PI proposal as co-PI.		https://forms.illinois.edu/fileAuth/958322_Q4_date_20200406_id_318396.doc
Kris Hauser	kkhauser@illinois.edu	Clinical expertise, human factors, telepresence	Robotic telepresence could have a major impact on COVID-19 response. By keeping human-human contact to a minimum, this technology could help keep healthcare workers from being infected, and could help other workers do their jobs safely even under pandemic conditions. My lab has two telepresence platforms, one a custom-built two-handed mobile manipulator, and another commercial telepresence robot. The former platform is intended for tele-nursing, but as a general-purpose mobile manipulator it could also be applied to other jobs. I would also be interested in studying how to cheaply augment existing commercial telepresence robots ("Skype on wheels") to produce better experiences, either through VR, or additional actuation capabilities.	kkhauser.web.illinois.edu/kris.hauser.cv.pdf	
Michel Regenwetter	regenwet@illinois.edu	Secure behavioral web experiment at very large scale. Access to and execution of large scale and fast collection, processing, and public release (to provide access to behavioral scientists world-wide), of behavioral data. This includes the need of expertise in recruiting a large number of healthy, sick and recovered patients.	Collect large scale behavioral economics and psychology data for public domain from healthy, sick, recovered covid patients, pandemic health workers (in collaboration with OSF who are on board, and maybe other health networks). Domains of inquiry include knowledge (risk literacy, health literacy), beliefs (related to covid), reasoning about risk, moral and ethical judgment related to covid, attitudes towards relevant policies. Quantitative behavioral analyses ranging from individual to collective behavior, including consensus analysis. Comparison of health professionals with healthy, sick, recovered patients, comparison of insured and uninsured. Generating a large de-identified behavioral database for scholars worldwide.	https://forms.illinois.edu/fileAuth/373176_Q4_date_20200407_id_318509.pdf	
Niao He	niahe@illinois.edu	public health, medicine, or epidemiology disciplines	1. Efficient and robust macro prediction of pandemics based on micro event histories under missing information 2. Using temporal point processes to understand the self and mutual excitation, clustering effects of COVID-19 pandemics		https://forms.illinois.edu/fileAuth/574397_Q4_date_20200407_id_318545.pdf
Volodymyr Kindratenko	kindtrnk@illinois.edu	ML/DL models development datasets development	development of a dataset and models for NLP-based analysis of the relevant literature		https://forms.illinois.edu/fileAuth/774417_Q4_date_20200407_id_318573.pdf
Jana Diesner	jdiesner@illinois.edu		Can offer: - Expertise in social computing/ computational social science, human-centered data science, social network analysis, FATE (fairness, accountability, transparency, ethics), natural language processing under consideration of culture and context Interested in: - impact of crisis mode, uncertainty, distancing on socio-economic environments and coping mechanisms	http://jdiesnerlab.ischool.illinois.edu/publications/CV_JanaDiesner.pdf	https://forms.illinois.edu/fileAuth/971592_Q4_date_20200407_id_318671.pdf
Hongyan Liang	liangh@illinois.edu		1). Modeling, simulation, prediction of COVID-19 propagation and efficacy of interventions 2) Logistics and optimization analysis for design of public health strategies and interventions		https://forms.illinois.edu/fileAuth/37353_Q4_date_20200407_id_318703.pdf
Venera Bekteshi	vb456@bath.ac.uk	Sociodeterminants of health	Compare and contrast comprehensive U.S. and U.K, Germany and China responses to COVID-19 including medical, political and social responses to preventing the spread. Suggest recommendations for future more effective responses.		https://forms.illinois.edu/fileAuth/102701_Q4_date_20200407_id_318721.docx
Nathan Castillo	nathanc@illinois.edu	Digital learning design with an ability to develop solutions for impoverished, under-resourced communities.	My aim is to develop a digital learning solution so that future pandemics or other disasters don't erase progress toward learning equity. COVID-19 has presented a major barrier for continuing progress toward learning objectives among children of poorer households without computers or high-powered connectivity. Importantly, this proposal would develop a pro-poor solution to provide continuity of learning and instruction for affected communities through an appropriate, low-bandwidth digital learning approach.	https://forms.illinois.edu/fileAuth/9822_Q4_date_20200407_id_318734.pdf	

Brighten Godfrey	pbg@illinois.edu	Looking for a PI who can use my group's expertise -- specifically, networking, systems, cloud, algorithms; and recently some work in fast maximum likelihood estimation. (Details below.) I'm not currently planning to lead a proposal on my own.	Interests: networked systems and algorithms, including low-latency communication, high performance transport algorithms, cloud & data centers, network security, applications of ML to networked systems, and network analysis. COVID-related work could possibly involve apps needing low-latency communication or cloud support, new kinds of bandwidth demands, data center performance, network security, or graph algorithms & analysis. In addition, we have a project on fast maximum likelihood inference in discrete domains, which could possibly be relevant.	http://pbg.cs.illinois.edu/tmp/cv.pdf	
Yuguo Chen	yuguo@illinois.edu		Build network models to study the spread of the disease, estimate the number of infected but untested people based on observations of those that have been diagnosed, use simulation to study the spread of the disease under different types of interventions.	https://publsh.illinois.edu/yuguo/	
Yi Lu	yi-lu@illinois.edu	Experts in machine learning (ML), artificial intelligence (AI) or the internet of things (IoT) who are interested in collaboration with my group on transforming the SARS-Cov-2 infect-ability data we can collect using smartphone-based biosensors (see my group's expertise in the next item) on patients and surfaces in public places into data in cloud and analyzing them using AI algorithm.	While many COVID-19 diagnostic tests have been developed and used, few test, if any, can inform infect-ability (i.e., whether the SARS-Cov-2 virus is infectious or not). We have developed a method for rapid, direct and portable detection of viruses that can inform infect-ability of the virus of both samples in patients and surfaces of the public places (e.g., hospitals, airports and grocery stores). When interfaced the biosensors with smartphones, the information about infect-ability of the virus will allow cloud-based analyses to inform actions for COVID-19 and future viral outbreak.	https://forms.illinois.edu/fileAuth/225765_Q4_date_20200408_id_318864.pdf	
Tarek Abdelzaher	zaher@illinois.edu	Id be very interested in finding collaborators from epidemiological modeling!	My recent work models cascade propagation (primarily information cascades on social media). Since information (not unlike viruses) propagates by human contact via a "facilitating medium" (perhaps an online subreddit or a Facebook wall, or perhaps proximity at a grocery store), there are interesting analogies and possibly novel insights that I'd like to bring to the table for understanding/predicting COVID-19 spread; especially understanding the effects of social distancing (removal of some "facilitating media"). My other interest is to use public data collected from social media, such as Twitter and Reddit, to fill-in missing pieces in cascade propagation and after-effect evolution dynamics (e.g., measuring prevalence of symptom discussions/queries, understanding social response to distancing, estimating economic impact, mapping emerging shortages, surveying attitudes to executive orders, etc). My other projects relate to Internet of Things (IoT) and AI applications. Here is my publications page: http://abdelzaher.cs.illinois.edu/publications.html	http://abdelzaher.cs.illinois.edu/publications.html	
Kevin Leicht	kleicht@illinois.edu	Web scraping, twitter, facebook, reddit and anything having to do with cell phones/geo-tracking.	I've got two research teams going right now. One is an extension of my NCSA fellowship and will attempt to track, via twitter, facebook, and social media, the spread of bogus or dubious coronavirus information. The goal will be to construct network models that tie social media spread to existing cultural, economic and political conditions in localities. The group is already preparing a RAPID via NSF that should be submitted before the C3ai deadline of May 1st. We presently have Loretta Auvil on the project. We would like to keep her, but if you have any other suggests that would be very helpful. Thanks!		https://forms.illinois.edu/fileAuth/433489_Q4_date_20200408_id_318906.docx
Lavanya Marla	lavanyam@illinois.edu	AI and ML	Supply chain management and logistics solutions to (a) plan supplies of devices, equipment and people, (b) demand management using community engagement, (c) logistics of restarting the economy through collaboration between multiple agencies by scheduling how workforce is gradually released from stay-at-home.	https://publsh.illinois.edu/lavanyam/	https://forms.illinois.edu/fileAuth/717318_Q4_date_20200408_id_318958.pdf
Weihao Ge	wge2@illinois.edu	epidemiology, agile app development, cloud computing, GIS	I would like to use the data from some self-reporting app and the WHO data to select models that would be suitable to predict the risk in certain areas. The program starts with several hypothetical models for epidemiology and select the best model for prediction with real-time data.		https://forms.illinois.edu/fileAuth/268046_Q4_date_20200408_id_318980.pdf
Liudmila Sergeevna Mainzer	lmainer@illinois.edu	virology, epidemiology, civil engineering (e.g. transport), community service	My team can provide software development support, including agile update of machine learning models, and deployment in the cloud; we have worked with West Nile Virus incidence predictive models.	https://wiki.ncsa.illinois.edu/display/CPRHD+also+see+https://wiki.ncsa.illinois.edu/display/LH	https://forms.illinois.edu/fileAuth/325829_Q4_date_20200408_id_319085.doc
Jessie Chin	chin5@illinois.edu		I would like to study the generation of crowd wisdom in the emerging science of COVID-19, especially how collective acquisition or creation of knowledge about an uncertain area of knowledge.		https://forms.illinois.edu/fileAuth/357132_Q4_date_20200409_id_319152.pdf
Kevin Wise	krwise@illinois.edu		Since my own research focuses on the processes and effects of media use, I'm keenly interested in exploring the role of media use as both antecedents and consequences of human behavior pertaining to COVID-19. Both media use and human behavior can be construed very broadly. Media use variables could include things like viewership of live press briefings, social media activity, primary news sources (e.g. television, newspaper, social media) or even daily visits to public-facing data aggregators (e.g. Johns Hopkins). Human behavior could include both perceptions (e.g. efficacy of precautionary measures, source credibility of various actors) and actions (e.g. social distancing, shopping). I would expect that data relevant to these phenomena are available within the C3ai and Azure platforms and I would love to join a team (even if only at the periphery) that would facilitate their exploration.		https://forms.illinois.edu/fileAuth/162544_Q4_date_20200409_id_319191.pdf
Tamas Ambrisko	tambrisk@illinois.edu	Digital Signal Processing expert Medical Doctors on the field of ICU or Cardiology	Developing an ECG telemetry system that is capable of data collection from multiple patients and facilitates advanced signal analysis such as high frequency electrocardiography. We plan to use this device to organize a clinical study using COVID-19 patients. The aim is to correlate ECG signal features with patient outcome using Machine Learning.		https://forms.illinois.edu/fileAuth/457490_Q4_date_20200409_id_318949.pdf
Shaowen Wang	shaowen@illinois.edu	deep learning, public health, environmental health, and health disparities	This project aims to rapidly establish a WhereCOVID-19 platform (https://cybergisxhub.cigi.illinois.edu/wherecovid-19/) for mapping and predicting where COVID-19 is spreading across different geographic scales while providing an online spatial decision support system for identifying populations at risk and targeting health care interventions. The platform will be developed collaboratively with computer scientists, public health and epidemiology researchers, and public health officials with the aim to provide a one-stop geospatial data and analysis system to support their research and decision-making for optimal health outcome.	https://ggis.illinois.edu/directory/profile/shaowen	https://forms.illinois.edu/fileAuth/271035_Q4_date_20200410_id_319393.pdf

Rini B. Mehta	rbhtchr@illinois.edu	Fellow researchers from US universities who work and think in an interdisciplinary way, ranging from computer science to history, literature, and media studies. We are looking for one collaborator with a strong machine learning background.	<p>Our proposed project seeks to create (1) a data-based analysis of the long-term effects of the COVID-19 pandemic on the production and dissemination of art, literature, and humanistic branches of knowledge throughout the world and (2) models for preserving and innovating methods for continuing creativity, teaching, and research under conditions of extreme isolation and quarantine that may come in future. Just as continuous and vigilant scientific modeling of contagion will help us navigate such crises in the future, an extensive planning to protect our collective cultural heritage/resources will ensure the resilience of the fabric of human society.</p> <p>The responses to the COVID-19 pandemic at this moment are justifiably focused on tangible effects such as number of infections and lives lost, jobs disrupted and terminated to contain the infections, and involuntary im/mobilization of populations throughout the world. We have just an inkling of the disruptions which are currently overshadowed by an apparent surplus of content over the internet. But after the current supply of art and knowledge objects run their due course, we will need to resume production of knowledge, creativity, and critical thinking. Artists and educators alike need to take stock of tangible and intangible resources that can be saved /disseminated on a global, more equitable level.</p> <p>With this general framework in mind, we are looking for fellow researchers from US universities who work and think in an interdisciplinary way, ranging from computer science to history, literature, and media studies. We are looking for one collaborator with a strong machine learning background.</p> <p>Pls: Rini B. Mehta, Kalina Borkiewicz</p> <p>CoPIs: Anita Say Chan, Ben Grosser</p>	https://forms.illinois.edu/fileAuth/697257_Q4_date_20200410_id_319467.pdf
Jessica Li	jl2011@illinois.edu	AI and data science	<p>In relation to COVID-19 or pandemics more broadly, I am interested in the following two topics:</p> <p>1. Response to pandemic: how to mobilize people to respond to the needs created by the pandemic. For example, use big data and data science to do two things: 1) identify skilled support needed and where; and 2) collect the competencies of volunteers and match them with the needs. The support can be physical or psychological.</p> <p>2. Recovery after the pandemic: identify, develop, and match skill development with the future workforce needs of the workplace. Prepare the workforce for the recovery effort.</p>	https://forms.illinois.edu/fileAuth/278746_Q4_date_20200410_id_319481.docx
Eleftheria Kontou	kontou@illinois.edu	machine learning, uncertainty quantification	<p>I am interested in topic 9 (improving societal resilience in response to the spread of COVID-19 pandemic) of the c3.ai DTI call announcement. I describe my brief plan for pursuing research to meet the topic's objectives below.</p> <p>My group plans to leverage DTI datasets as well as several US (federal and state) open source spatio-temporal big - databases that describe socio-demographic characteristics (e.g., American community Survey, Time Use Survey) of those infected/recovered/passed. We will also leverage critical infrastructure (i.e., road, hospitals, etc.) and business data (e.g., Homeland Infrastructure Foundation Level Data from Homeland Security open databases) to train machine learning models that will predict vulnerability to impacts of epidemics for US communities. Given the geospatial nature of the relational databases that we will leverage, we will host an application that will demonstrate the geography of the vulnerability metric for COVID-19, Bayesian network and other models will be leveraged to access the impact of health and infrastructure and other network related interventions (i.e. shelter in place advisories) on the adaptive capacity of communities and demonstrate resilience gaps.</p>	https://forms.illinois.edu/fileAuth/31192_Q4_date_20200410_id_319503.pdf
Halil Kilicoglu (also on behalf of Bertram Ludaesch er and Tim McPhillips)	halil@illinois.edu	Research expertise in lab experiments to validate potential drug leads	<p>We're interested in building a drug repurposing/discovery-focused knowledge graph that combines relevant computational biology/structural genomics algorithms/pipelines with discovery algorithms based on semantic processing of scientific literature to allow researchers query the results of computations in a way that is scoped to a particular disease (in this case COVID-19) or drug. We're seeking collaboration with lab scientists who can validate drug leads generated through these computational approaches.</p>	https://ischool.illinois.edu/people/halil-kilicoglu, http://cirss.ischool.illinois.edu/person.php?id=29
Mark Neubauer	msn@illinois.edu	<p>Machine learning & Artificial Intelligence</p> <p>Data science</p> <p>Software and computing for data-intensive (science)</p> <p>Medical Imaging</p>	<p>My research is at the intersection of data-intensive science and machine learning. I am a leader in an international effort to bring the expertise of "Big Science with Big Data" (particle physics and related fields) and computation science in tackling some of the challenges around COVID-19</p> <p>https://science-responds.org</p> <p>I am exploring options for c3.ai DTI proposals to help address the COVID-19 pandemic, particularly around machine learning and computing/data-intensive aspects such as medical imaging. I would be interested in discussing matters around team building for possible proposals.</p>	https://msneubauer.github.io
Yang Wang	yvw@illinois.edu	<p>Privacy;</p> <p>Modeling and predicting user behavior;</p> <p>Designing nudges and intelligent user interfaces;</p>	<p>Can offer:</p> <p>Privacy analysis and/or enhancement of mechanisms to monitor or mitigate the pandemic;</p> <p>Large-scale studies or experiments to model and predict human behavior;</p> <p>Designing user-facing systems to motivate certain behavior (e.g., opt into contact tracing)</p> <p>Interested in:</p> <p>Modeling the impact of (privacy-enhancing) contact tracing mechanisms on individuals, community wellbeing, and public health</p>	https://yangwang.ischool.illinois.edu/cv/yangwang_cv_academia-long.pdf
Justina Zurauskiene	justina@illinois.edu		<p>Development of statistical ML approaches/pipelines for the analysis of health disparities and maternal health data; in particular COVID-19 impacts on maternal health and birth outcomes in health disparate groups. Current team is partnering with CUPHD on several projects on health disparities and data analytics (local birth/death data, gestational diabetes).</p>	https://forms.illinois.edu/fileAuth/319304_Q4_date_20200414_id_320565.pdf

We have also received the following interest from folks at the University of Pittsburgh:

Shyamal Peddada <SDP47@pitt.edu>

<https://publichealth.pitt.edu/biostatistics/about/special-message-from-the-chair>.

