



**Getgee.xyz**

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## The Getgee project

### **Purpose:**

Information must be a human right. Governance is not by democracy or consent if we are denied the information we require in order to make decisions or if we are misled with false information. It is not enough to declare freedom of speech or internet access as human rights. Technology must also be structured to facilitate access to accurate, verifiable information.

G is a universal database and trust network created to regain public control over public information.

### **Background**

Technology corporations have lately become incredibly wealthy and powerful by controlling and exploiting access to the information we all create. These corporations abuse the control they exercise over all of our data, our work and our networks, because they can and because it is profitable for them to do so. From monitoring our shopping and browsing habits to manipulating what mood we are in or whether we vote, these corporations are replacing our traditional governance and media structures with corporate dictatorships that have no social interest and exist to provide maximum profit for shareholders. Their users tolerate this abusive relationship because they don't want to lose all the years worth of data or the networks of contacts they have created.

In past years, a great deal of money, time and code have been spent in trying to address the problems with the existing platforms by replacing them with duplicate alternatives but the problems outlined in this document are not the fault of any particular software. They are a fault in the way the web was designed. The web was never designed for mass collaboration. It was created to mirror academia, to have isolated pages of information citing isolated pages of information. The Internet now is primarily databases, not pages of information, so the result is an Internet constructed as a series of pages controlling access to sealed wells of information. Even if we have access to every page on the Internet, we never have full access to the sealed wells, collaboration across them is difficult to impossible, and the data in them is controlled by corporations and used in ways we did not consent to. To add insult to injury, we created all the information in those sealed wells.

There is no point in creating another Twitter, another Facebook, another Google, another thought bubble with its own sealed well that doesn't address any of the root problems that allowed these platforms to disregard the wishes of their users. The corporate control of user information is what created the fertile ground for corruption in the first place.

A universal database and trust network will return control of our data to the users who created it while still allowing for mass collaboration. If any application software starts antagonizing its users, they can just get rid of it and use something else without losing all the work and networks they have spent years building up. They can also choose the application functionality they want. The structure is an ecosystem, anything can be replaced without destroying the whole.

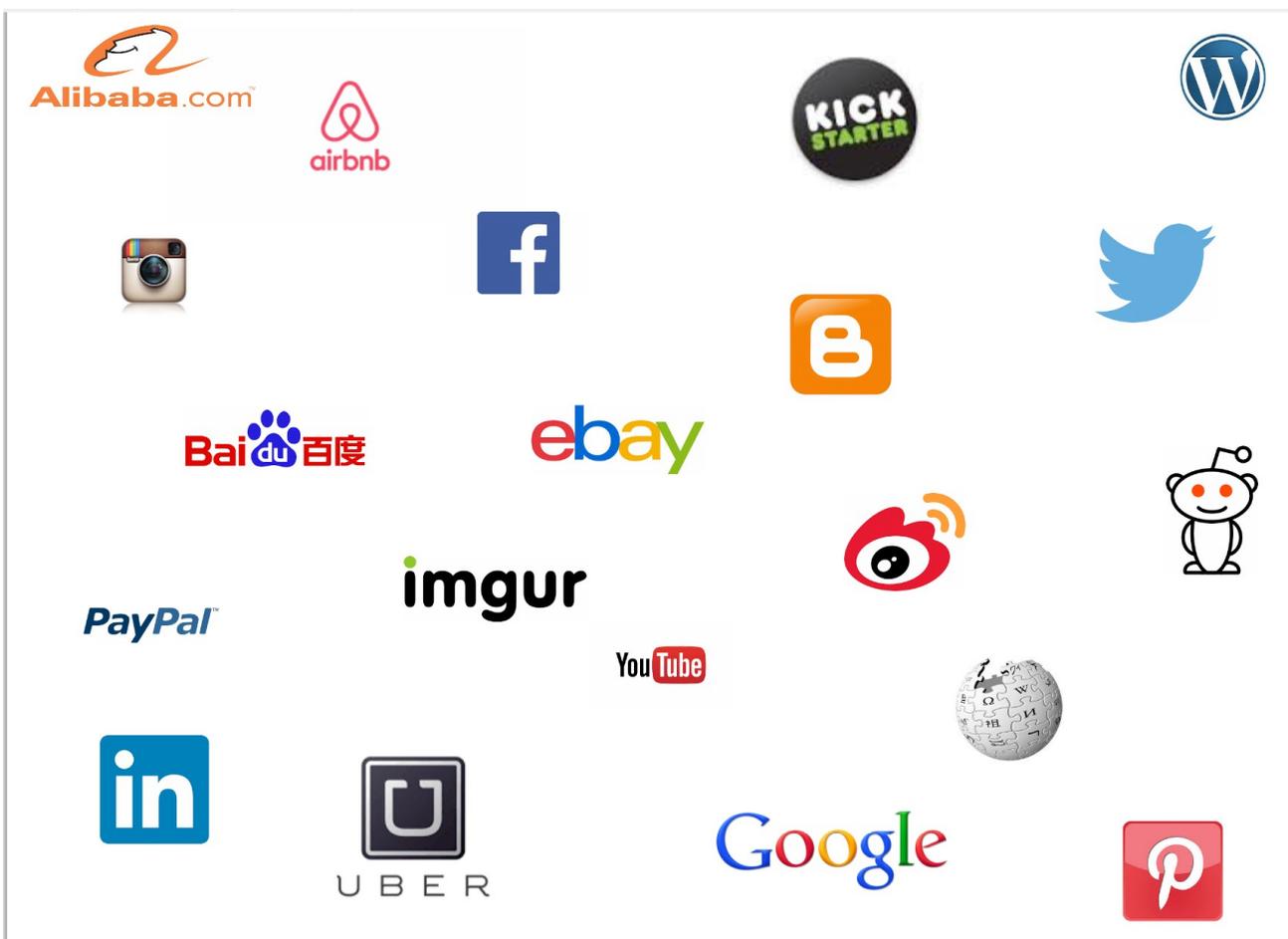
This project needs both funding and expertise for ongoing development. Contact me at **HeatherMarsh@riseup.net**.

## Sealed wells of user created information

In every case, the thousands of billions of dollars in corporate value represented by the logos below comes from a page that seals a well of user created information. The only value on these platforms is data. They have also written a lot of front end software and many of them have released a lot of software to the open source community but that is not where the value is. If it was, we wouldn't be getting it for free. The value in all cases is the user generated data they control access to.

G decouples the databases and trust networks so users can replace the functionality of any of the applications below and still retain all of their data and contacts under a different front end. This reduces the value of nearly all the unicorn corporations in existence right now to just a piece of application software that provides some functionality on top of the user controlled data. G reduces the corporate control to control over only their own software product, not user data. It also allows collaboration at the data level so collaborators do not have to agree on a single piece of application software and that can be left to individual choice.

We have free software. We are working on free networks. We need free databases.



## **Problems with existing online and social media**

### **Political manipulation**

Examples of this type of coercion have been seen recently in the automated twelve hour Twitter trend of an English hashtag in support of the Brazil coup and a massive (and also English) astroturf campaign in support of a 2014 attempted coup in Venezuela. The purpose of these campaigns is to give the appearance of widespread grassroots support for coups which subvert democracy and skew outside perception. Foreign governments can then quickly accept the new corporate friendly presidents as was seen in the Paraguay coup of 2012.

Another example of online manipulation to influence election outcomes in Nicaragua, Panama, Honduras, El Salvador, Colombia, Mexico, Costa Rica, Guatemala, and Venezuela is described by current Colombian prisoner Andrés Sepúlveda in [a recent article in Bloomberg](#). The techniques described in the article are very familiar to online activists and are used by states and corporations globally. In an election as long as the US, even 4chan has the opportunity to [manipulate and increase sectarianism](#) to their heart's content. Election manipulation goes beyond influencing opinion and also tracks and predicts individual voting preferences, a far more dangerous subversion of democracy.

### **Corporate manipulation**

Every form of open and hidden advertising designed to manipulate the public is practiced by these platforms, including hiding information which corporations want hidden and gathering personal data for advertisers.

### **Astroturfing**

Astroturfing is propaganda designed to simulate grass roots movements and drown out all information the states and corporations who pay for it don't want seen. Astroturfing can be intimidating or frightening as some of it is very aggressive and threatening. It is frustrating, as you never know if you are talking to a real person or wasting your time with a bot. It contributes a great deal to all the noise we have to wade through looking for information, and it is very chilling to online conversation. It has made social media, especially Twitter, almost unusable for dialogue.

### **Celebrity noise**

Not only is celebrity not real influence, the two are mutually exclusive. Celebrities are those riding the peak of the wave of mainstream opinion. They do not express thoughts in opposition to acceptable mainstream opinion. They are not voices that are seldom heard, by definition. They definitely do not speak at a level of elite expertise. The more people who can understand and agree with their message, the wider their appeal will be.

It is counter intuitive to think celebrities can influence us to move in a new direction. If we want to hear voices that are seldom heard, that expand our Overton windows and give us some fresh perspective, or bring an elite level of specialized knowledge to explain some breakthrough, or challenge our current opinions by presenting opposing thought, amplifying celebrities is the exact opposite of what we ought to be doing. Celebrity amplification is creating noise which drowns out the thoughts we need to hear and keeps us stuck in the same place.

### **Thought bubbles**

A thought bubble is a forum which is closed to outside thought or opposing opinions. Once online forums reach a certain size and age and the members have reached some consensus around many topics, they start to create their own culture and develop their own ideas of what are acceptable viewpoints and what ideas are taboo, like all cultures do. At that point, any opposing viewpoints are pushed out and shunned until they go off and create their own little thought bubbles of people who agree with them. Just as they weren't allowed to participate in the main forums, the smaller thought bubbles also typically push out everyone who disagrees with them and collect resources that support only their ideas. When Facebook and Google see what each group are interested in, they feed them even more information in support of their existing views so each side begins to live in purified thought bubbles where only their thoughts exist.

While affinity groups are very beneficial, and small thought bubbles can be useful for formulating viewpoints in opposition to those held by wider society, without transparency, communication and reconciliation between thought bubbles these online forums are contributing increasingly to intolerance and sectarianism within our societies.

### **Truth dictatorships**

Truth dictatorships are platforms which present one view of reality as a complete 'truth' or 'fact' and rank facts according to their own order of importance. Truth dictatorships are great at promoting the status quo and celebrity ponzi schemes, they are themselves thought bubbles, and they are prone to photoshopping, where those writing history remove aspects of a story which the writer does not deem relevant or agree with and leave only those which support the writer's bias.

With G, we filter out astroturfing and spam using trust networks. We don't have celebrity noise because the structure promotes information and people contributing research, not celebrities. We can't create community thought bubbles because everyone has control of their own information filters. We have diversity of opinion and we allow for different realities. We let our own trust networks decide what is important to show us instead of leaving it up to Facebook and Google.

## Information types

**Personal information:** The goal is security against dissemination. Ideally, we want to keep this off the Internet and if that is not possible, encrypt it and keep it under user control and easily deleted. Being forced to exchange personal information in order to access public information is our biggest obstacle.

**Public information:** The goal is freedom from censorship or other deletion or modification (the exact opposite of what should be the goals for personal information). Most applications with a primary goal of making information public use peer to peer with or without blockchain.

**Personal messaging:** The goal is to know who you are talking to and keep your conversation private. Treat this like personal information and add the fact that we need to be sure of who we are talking to.

**Broadcasting:** The goal is wide dissemination (the exact opposite of what should be the goals for personal messaging). This goal is difficult to achieve without a centralized platform or index.

**Personality focused:** The goal is promotion of personalities (or brands). Official blue checks and followers are common. Social media is almost universally personality focused, designed to promote thought leaders over thoughts.

**Information focused:** The goal is research, auditing and dissemination of information. At best we can use Wikipedia, some mainstream media and specialized research platforms. There is a huge need for information centred solutions.

**Read only:** Most information on peer to peer platforms is read only.

**Collaborative:** The goals are latency compensation, speed, and the ability for multiple simultaneous editors. All the goals of a seamless front end collaborative performance do not correlate with a back end trying to serve peer to peer data.

**Decentralized platforms:** The goal is to escape dependency on one server or platform, but they frequently create multiple little centralized servers or platforms, each with their own tyrannical or benevolent admins. They make your data impossible to delete if they are linked to other instances and by eliminating central control they also eliminate central responsibility.

**Decoupled data:** The goal is freedom from corporate ownership of data, freedom from software dependency, data reusability and versatility of use. Data is separated from application software and is agnostic to what applications are used to access it. Decoupled data is necessary so all of the above types of information and their very different and frequently opposing goals can be accommodated. For this we need a universal database.

**Broadcasting collaborative public** data without platform dependency is a difficult problem. Our greatest unresolved need is for a collaborative information commons, for open journalism, for open science, and just for fun. For this we need a layered ecosystem of decoupled data.



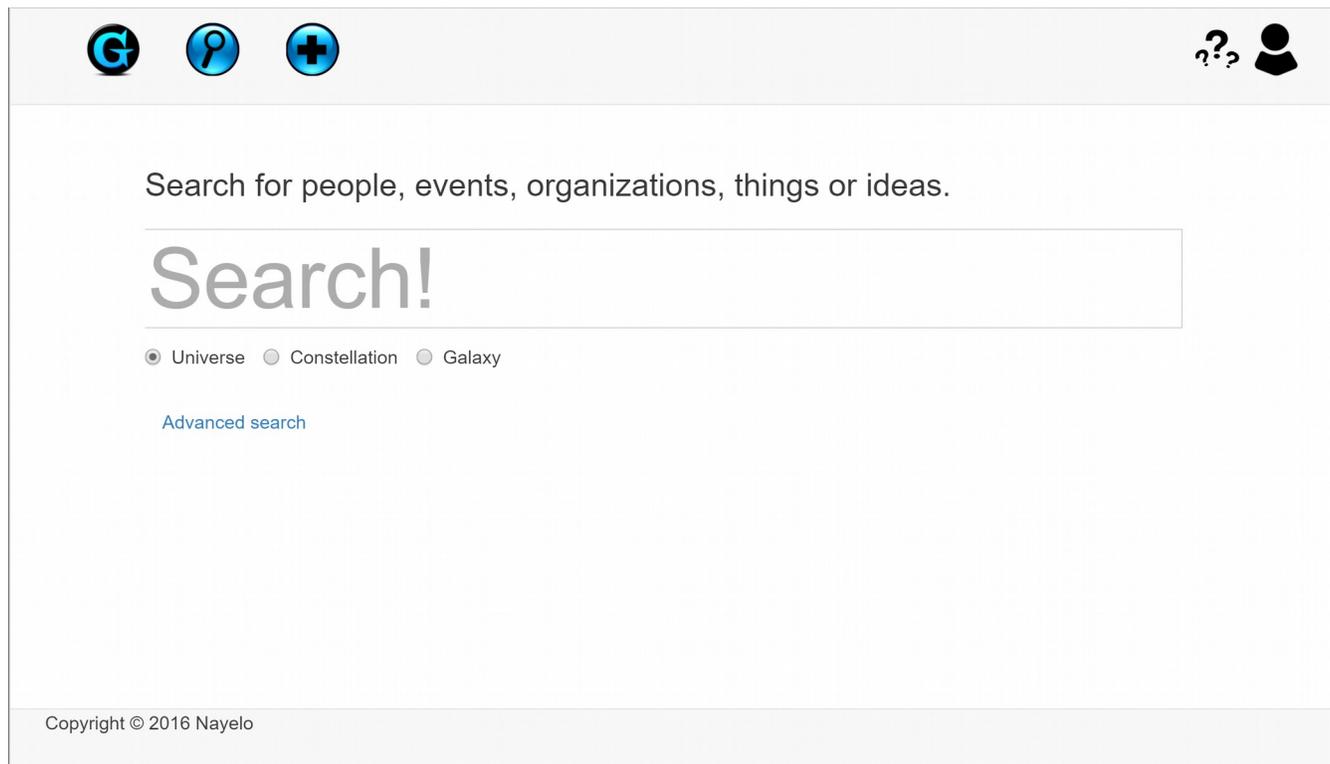
G replaces the traditional stand alone app structure with a layered ecosystem. The universal core data objects which allow all information to be linked together are hosted on a peer to peer system along with classification trees. Classification trees can be created by data analysts to allow standard categorization of the types of core data nodes and possible relationships between them for each use case. Researchers, journalists, organizers and other information creators import core data objects and classification trees into their own autonomous and editable collaborative spaces, hosted on personal or federated servers or wherever they choose. These collaborative spaces are used to map relationships between universal objects in a graph database, and link source media.

Users can find any graph database constellations linked to the universal data nodes and classifications used by them. They can then merge, search, and filter the information in these constellations into read only galaxies and import the selected data into their choice of application software to provide added functionality. Because the public data is decoupled from the application, personal information can now be stored in a secure method of the user's choice and the choice of application software is also up to them. Instead of relying on recommendations from a search engine or application, users can also use trust networks to help them filter information or establish accreditation.



G is accessed through a two button app that does everything we ever do with databases. We can search, or we can log in and create, update and delete. Search is used to find Constellations through universal data objects or classifications. Advanced search can merge and filter Constellations into read-only Galaxies which can be exported into other applications. Both classification trees and universal data nodes are created only through Constellations (classification trees and universal data objects that are not used in any graph database are not allowed). Plug in applications can be added to provide added functionality to Constellations or Galaxies.

Everything can be created with a fiction toggle and fiction can be filtered out of search results. Search results can also be filtered within specified degrees of a trust network and Constellation editors can be added explicitly or within degrees of trust.



## Universe

Universe is the atomic level of a global commons database. It contains the base units we can all link to in all of our work. There are five entity types: person, organization, event, thing and idea.

Almost any attribute of these universal objects is subjectively important and changeable, so they have very few attributes associated with them in Universe. Since even the bare minimum attributes we include are still subjective and changeable, each data object is a hypernode that can contain multiple linked realities. It does not matter which reality is used, all will appear associated with the same data object. Reality types are temporal (Bradley Manning and Chelsea Manning are two temporal realities of the same person), perceptive (Islas Malvinas and The Falklands are two perceptive realities of the same islands) and linguistic. The reason we have three different reality types and five entity types is because they have slightly different attributes so we can do things like attach geotags to events and organizations and map them or string temporal realities in a timeline.

These universal data objects are read-only and stored in a universally accessible peer to peer database. They link to all Constellations referencing them. They can only be created through Constellations and if the last Constellation referencing them is deleted, so are they.

### **Classification trees / Metaverse**

In order to create meaning from a data object, we usually have to relate it to another data object. For example, a person contributed to an organization, had a relationship to another person, or participated in an event. In order to group and filter data objects, we usually need to classify them.

Usually these types of relationships and classifications are part of schemas included in applications developed by programmers. For instance, in Ebay, there is code defining buyers, sellers, products and their relationships. These relationships do not have to be coded by programmers and in fact they shouldn't be. Programmers can't predict all the ways users are going to use their data. Users are always doing unexpected things with data and then programmers have to change the schemas and it is usually difficult. We can give users the ability to create classification trees to map categories for each of the five entity types and every relationship between them to allow for flexibility and diverse use cases.

Creating classification trees is beyond the ability or the interest of the average user but it is not beyond the ability of a data analyst with knowledge of the sector. This is like blog themes: a blog platform gives you the ability to create blogs but if people create themes for it they provide more versatility and usability for a greater number of use cases. When data analysts create classification trees, other users can pull them in to use in their own work.

These classification trees are stored in a universally accessible, read-only, peer to peer database. They link to all Constellations referencing them. They can only be created through Constellations and if the last Constellation referencing them is deleted, so are they.

### **Constellations**

A Constellation is an autonomous space where each user can work by themselves or add editors or open editing up within selected degrees of their trust network. Constellations map relationships between data nodes from the Universe data commons using categories from classification trees. External media nodes can be linked as the source references for each object or relationship in Constellations (like hypertext but in a graph database). Currency transaction receipts can be added to currency transfer relationships in the same way.

Constellation graphs can be embedded in other work, shared on social media or merged and filtered into Galaxies. Software applications can be added as plug ins to Constellations to provide added functionality. If you tap on any of the nodes used, all constellations associated with that node are displayed, even if they used entirely different classification trees.

Constellations are stored in editable, collaborative spaces such as personal or federated servers.

## **Trust network**

Trust networks are optional friend to friend networks of people whose knowledge and judgment we rely on to help us filter our data or to grant editing permissions. A filter of zero degrees of trust contains only items we ourselves explicitly trusted, one degree also contains anything trusted by those we trust, and so on. Trust networks can also be used to indicate institutional accreditation.

## **Galaxies**

Galaxies are read-only data collections created by merging and filtering Constellations. The data in galaxies cannot be modified. It is updated as the Constellations are edited. Galaxy data collections can be stored in collaborative spaces and have plug-in applications added just as Constellations can or the data can be exported to software applications.

Galaxies help avoid monopolies. Even if one Constellation becomes the dominant site for a particular use case, Galaxies can always be created to combine Constellations and prevent shutting out smaller sites from greater traffic. Galaxies will probably be more used than large Constellations in any case, as the filtered data is faster and more useful for any regional or similarly categorized data.

## **Front end applications**

Application software can add any functionality to the data without controlling access to the data. While certain application software may impose its own restrictions, for instance U.S. flight or hotel booking software may exclude Cuba, Cuba data will still be in the database and accessible by any other application software.

Users can choose the functionality they want. They don't have to go through one application for everything. They can have a little stripped down, read only app on their phone and a giant application on their laptop. They can collaborate at the data level with people using entirely different software.

## **Use cases**

### **Journalism**

Instead of transient news, new information is added to a permanent knowledge repository so it encourages deeper research over trivial updates. There is no need to cut and paste the same news repeatedly if it is all linked. We can have more fluid collaboration between journalists because they retain autonomy and credit for their own work but their research is automatically linked with everyone working on the same topic and it can be combined in galaxies. Because the data is in a usable format instead of just wall of text articles, we can import it to other applications and combine and filter it to create more information. We get far deeper meaning and more context and usability and collaboration from the same research effort.

Galaxies and front end applications can allow news to be displayed with different contexts. For instance, instead of mapping conflicts always by state, it is possible to view them mapped over resource corporation activity, climate change, income disparity or any other data to look for other possible relevant links.

## **Whistleblowers**

Data can be easily uploaded into source media nodes and relationships mapped to be used as a resource for all researchers and journalists, not just a selected few. The Panama Papers could have been mapped in one constellation with editing permissions given to all the journalists involved and any outside person could create and link different constellations containing other data, such as other corporations a person was involved in, making the process much faster and more productive. We would also then have the data in a permanently usable format, in a global commons for us all to build from instead of unusable wall of text articles everywhere and a private graph database for selected journalists.

## **Commerce**

The buyer / seller / product relationships for all commerce sites can be specified in a commerce classification tree and documentation for financial exchanges can be linked as source media nodes. Rather than relying on easily manipulated site reviews and trust algorithms, we can rely on our own personal trust networks for filtering. Both sides of a transaction are far more likely to behave responsibly if there is a personal trust network linking them. Local or specialized merchants can create constellations to link each other together in a trust network as well, adding another local layer of accountability, local control over industry and the ability to allow regional diversity for local laws or customs.

While anyone can create a global galaxy of all the constellations for a particular industry, similar to Uber, Airbnb, Ebay or Alibaba, the fact that anyone can do it removes exclusive control from the galaxy creators. Without control over the data, galaxies are simply a tool for end users, allowing them to filter and merge data across multiple constellations. The software applications become simply that, applications which input selected data from galaxies or constellations and provide some front end functionality such as paying a taxi driver or buying a product.

## **Transparent and fluid organization**

Organizations can use constellations and galaxies both for transparency and for dynamic reorganization for specific tasks. Political parties are currently organized by region. A party can create constellations for each region and galaxies at national or international levels, leaving the ability to add or remove members from positions at the constellation level but still allowing collaboration at higher levels. A party can also be instantly reorganized by galaxies to allow collaboration across non-regional affinity groups. For instance, a German Pirate Party member in an environmental working group can belong to both a local and an international Pirate Party galaxy and also an international Pirate Environmental group. Better yet, they could belong to regional and international Clean Water and similar galaxies with no party affiliation. The benefit to these galaxies is the responsible person can change at the constellation level and the change will be instantly reflected in all associated galaxies. The data in every galaxy can be used in collaborative apps which allow groups to work without outside noise but completely transparently to the public.

## **Direct aid**

Instead of relying on NGOs, charities and non-profits, we can use our own trust networks to provide aid directly where it is needed and receive feedback directly from those receiving aid.

## **Direct trade**

We can establish direct trade relationships between communities which will allow consumers to see the immediate impact of our trade choices.

## **Funding platforms**

Using a trust network adds a needed dimension to make fundraising easier and provide more references and direct feedback for donors.

## **Science and research**

Instead of a closed circle of academia in which paper citations can be reflections of power or reciprocity, Idea nodes can be set up around any topic and all contributions heard.

## **Governance and law**

Principles of a society such as constitutions and bills of rights can have every definition and option listed with the historic or potential consequences of each definition and option easily accessible. For instance a principle such as *The right to life* has little or no meaning without defining the start and end points of life, whether the right of one includes the duty of all others in the society to ensure it and many other aspects. This clarification makes each point far easier for every member of society to understand and agree on and then ensure that all law in that society flows naturally from the root principles. For instance, if the right to life also includes the duty of each member of society to do what they can to ensure the life of another, then homelessness and extreme poverty cannot be tolerated by that society.

Once these principles are clearly defined, it is possible for every state or other society to accept or reject principles along with their specifications and the results can be easily accessible for all. It could also be possible to then use these accepted principles to choose association, for instance refuse trade with a corporation that refuses to accept certain environmental or human rights practices.

## **Technical specifications**

G is written with a front end in React and d3. Data collections are currently all being created as MongoDB collections until the universal data is tested and moved to a peer to peer system, probably IPFS.

## **FAQ**

### **What is the organizational structure of G?**

G will be administrated by a dedicated EU non-profit organization with a board of directors from journalism, human rights, academic and governance sectors. All aspects of the project must remain free for anyone to use, and without obligation to funders in conflict to the stated aims of a global commons database and trust network.

### **What does G stand for?**

Whatever you like. I am just claiming this letter of the alphabet before a certain corporation decides to make it their intellectual property.

### **Everyone else is talking about privacy, you seem to be going the other way?**

Because G separates public data into a data commons, it allows users the freedom to choose the most privacy respecting options for their personal data. If information that is meant to be public, such as a house for rent, is in a data commons, the user can keep their personal information, such as which houses they viewed or rented and their payment methods, private. It is only through separating personal and public data and decoupling both from application software that we can keep personal data from corporate control.

There is no such thing as perfect privacy on the Internet. Anyone with enough money and motivation is capable of tracking all of your online activity across all platforms and displaying it in one graph. Their job is made much easier if you use data mining application software. A universal database allows you to choose your own front end software to make it much more difficult to track you and G allows you to use pseudonyms and multiple identities for real world anonymity, something that is becoming more and more difficult with existing platforms. Since G leaves it to the user to filter spam using trust networks, we do not need the aggressive verification approaches of other platforms and we do not have any use for personal data.

Private communication is not the biggest issue facing us on the Internet, social manipulation is. An organized public with reliable information can solve the majority of the problems of spying by removing spies from positions of power and creating regulations and laws in support of privacy. An isolated and confused public cannot organize solutions to anything.

### **Why isn't there an entity type for place?**

Because place has different definitions. It either means location, which can be attached as geotags to events or organizations (the only times we want to reference that kind of place) or it means an organization, like a state or municipality or a thing like a house.

## **About me**

I was raised in one of the most isolated and impoverished communities in Canada's north. It was largely self governing with an economy based on social approval, not trade. I have spent most of my life working on anti-poverty, human rights and community developed solutions, from free stores and free education to community gardens and social care in many diverse communities. I am a programmer and have organized online as well for most of my life.

From 2010 to 2012 I was the sole administrator and editor of the Wikileaks news site, Wikileaks Central. My objective was to amplify problems and solutions from sources on the ground that were not being heard. My slogan for the site was *News, Analysis, Action* as I also wanted to encourage those reading leaks from Wikileaks, the Palestine Papers, etc. to move past passive news voyeurism and organize informed solutions. In 2012 I focused on all forms of social media organizing, especially how social media was being used to manipulate public opinion and action and how to best combat coercive techniques with the verification and dissemination of accurate information.

Mass collaboration tied to local organizing has been my primary focus of study for many years. My signed work (books, articles) is linked to my [blog](#) and GeorgieBC social media. Work related to G can be found on Github and on the website [Getgee.xyz](#).