

## Network history in the Great Lakes Region and Tkaronto

Toronto has a layered history of internet and wireless access projects...

The early 2000s is the first wave of European and American community wireless, a period Christian Sandvig (2004) describes as leaving largely unchallenged the structure or function of the internet. Toronto projects included Wireless Nomad, a co-operative providing subscriber and free public wifi, and Wireless Toronto, a volunteer non-profit community wireless network, both officially started in 2005.

A second wave from in mid-to-late-2000 on, networks developed around practices and discourses of what Alison Powell (2006) describes as "contextualization and politicization of Wi-Fi as an open network built by and for citizens." In Toronto, the reBOOT reLAV Neighbourhood Network pilot in Parkdale partnered with Parkdale Activity and Recreation Centre and Parkdale Community Legal Services to provide internet in a historically low-income area facing acute housing pressures and gentrification. These networks rely on models of grassroots deployment of hardware and frequently use open source software.

Non-profit internet service providers (ISPs), including Toronto Free-Net, have also operated

## Land acknowledgement

We would like to acknowledge the sacred land that Our Networks takes place on—it has been a site of human activity for 15,000 years. This land is the territory of the Huron-Wendat and Petun First Nations, the Seneca, and most recently, the Mississaugas of the Credit River. The territory was the subject of the Dish with One Spoon Wampanoag Belt Covenant, an agreement between the Iroquois Confederacy and Confederacy of the Ojibwe and allied nations to peacefully share and care for the resources around the Great Lakes. Today, the meeting place of Toronto is still the home to many indigenous people from across Turtle Island.

In order to begin to understand the relations to people and place that make up the networks of this region, we sought to learn about the covenant of sharing and caring in this place and with each other.

"The 'Dish' or sometimes it is called the 'Bow', represents what is now southern Ontario (from the Great Lakes to Quebec and from Lake Simcoe into the U.S.). We all eat out of the Dish—all of us that share this territory—with only one spoon. That means we have to share the responsibility of

in the city for over 20 years, connecting to part of the broader internet free-net systems movement, which were the first to offer internet access to the public and support non-profit community work online. Low-cost internet access projects, including from community information hubs, previously the Community Access Program and Ontario C&P, and recently the Toronto Public Library's hotspot borrowing program based on in-kind partnerships with major ISPs.

However, to see 'networks' only as operating around hardware and software diminishes the histories we draw on while understanding alternatives today. Activist communications projects, including Teo—or the THE OAT COLLECTIVE (Organize, Automate, Triumph)—provided free, safe, and secure communications tools similar to Riseup and other autonomous and alter-globalization media organizing.

Social justice and community organizing around local offline issues by groups including Digital Justice Lab, ACOORN, ImaginNATIVE, Freegeek, and intersectO remind us of the diverse ways to enact better networks together.

## Places

CN Tower 301 Front Street W—Tall tower whose purpose during planning and construction phase

ensuring the dish is never empty, which includes, taking care of the land and the creatures we share it with. Importantly, there are no knives at the table, must keep the peace.' Source: [1]

"The Great Lakes region takes its name from the corresponding geological formation of the Great Lakes Basin, a narrow watershed encompassing The Great Lakes, bounded by watersheds to the region's north (Hudson Bay), west (Mississippi), east, and south (Ohio). To the east, the rivers of St. Lawrence, Richelieu, Hudson, Mohawk and Susquehanna form an arc of watersheds east to The Atlantic.' Source: [2]

> [1] Land Acknowledgements:

trcjournalism.ryerson.ca/land-acknowledgement/

> [2] Wikipedia:

wikipedia.org/wiki/Great\_Lakes\_region

> Toronto for All:

torontoforall.ca/indigenous-peoples-of-tkaronto/

> Native Canadian Centre of Toronto: nccct.on.ca

> First Story App: firststoryblog.wordpress.com

was to help with communication services, although now it serves mainly as a tourist attraction.

University of Toronto SciNet, 661 University Avenue —Canada's largest supercomputer centre, which provides resources for Compute/Calculi Canada, a national infrastructure for supercomputing-powered research.

Toronto Free-Net Office, 600 Bay Street—A non-profit ISP (and one of the oldest) serving the greater Toronto area (GTA) since 1994, when few people could afford internet service or had access outside of research networks.

Colocation Facility, 330 Bay Street—The colocation centre is Navegata/TNW Networks is housed in the Northern Ontario Building which was built in 1925 by Chapman & Oxley. Marketing copy reads: "In the heart of Toronto's business and financial district, our Toronto colocation facility is an ideal location to colocate your critical servers."

Cogeco Peer 1 (now Aptum Technologies) 145 King Street W—Was a subsidiary of Cogeco Inc., a Canadian telecommunications and media company headquartered in Montreal, Quebec, but sold as part of a move into "hybrid cloud" services in 2019.

## New spirit of networks

On 2019-02-14 12:41 a.m., someone smarter than us wrote:

"Maybe the real mesh network is the friends we made along the way."

—Max Veylsman, Our Networks 2018

"Resistance is constructing everything that we need to maintain the life of our people"

—Zapatista community member quoted in Syn/ia Federici, Re-enchanting the World, 2018

"On one hand ... [we live in] an always-almost-falling-apart world. On the other, a world in constant process of fixing and reinvention, reconfiguring and reassembling into new combinations and new possibilities—a topic of both hope and concern ..."

The tucum of these two worlds is repair: the subtle acts of care by which order and meaning in complex sociotechnical systems are maintained and transformed, human value is preserved and extended"

—Steve Jackson, Rethinking Repair, 2014

151 Front Street—Canada's largest carrier hotel, owned by Allied Properties REIT, previously didn't have a history with in telecommunications but bought in for \$192-million in 2009.

The site of Toronto Internet Exchange Community (TorIX), a not-for-profit Internet Exchange Point (IXP). As of September 2019, TorIX has 257 members and peak traffic rates of 664 Gbps.

905 King Street—151 Front Street's sister facility.

St. Lawrence Market, 92-96 Front Street E—Plaque commemorating Canada's first electric telegraph, inaugurated on the 19th of December, 1846 and by the Toronto, Hamilton and Niagara Electro-Magnetic Telegraph Company.

CBC Building, 251 Front Street—Formed out of the CIBC in 1936, the Canadian Broadcasting Corporation (CBC) is a public broadcaster and federal Crown corporation. The CBC was originally controlled by the national government, and funded largely by taxes (licence fees) from owners of radio sets.

York University Computer Museum, 120 Campus Walk—Collections cover the history of computing and information technologies in Canada including M&BU network and Telidon.

"The repair or replacement of broken infrastructure is... necessary for any form of socially to extend itself"

—Lauren Berlant, The Commons: Infrastructures for Troubling Times, 2016

"Values are the facts of the future... Our world was shaped by the values that presided over its creation. Technologies are the crystallized expression of those values."

—Andrew Feenberg, Technosystems, 2017

Being the change you want to see in the world does not imply a complete rejection of society. It means to stay in the zone of creative tension between the ideal vision and the way the world works right now."

—elavio, %v7fAv6w0qsg2y2JX9e9tR76vXMCt-NLy2qYewA8=s3h26, on SSB, 2019

our:####  
networks

# RE: Infrastructures

## September 20–22

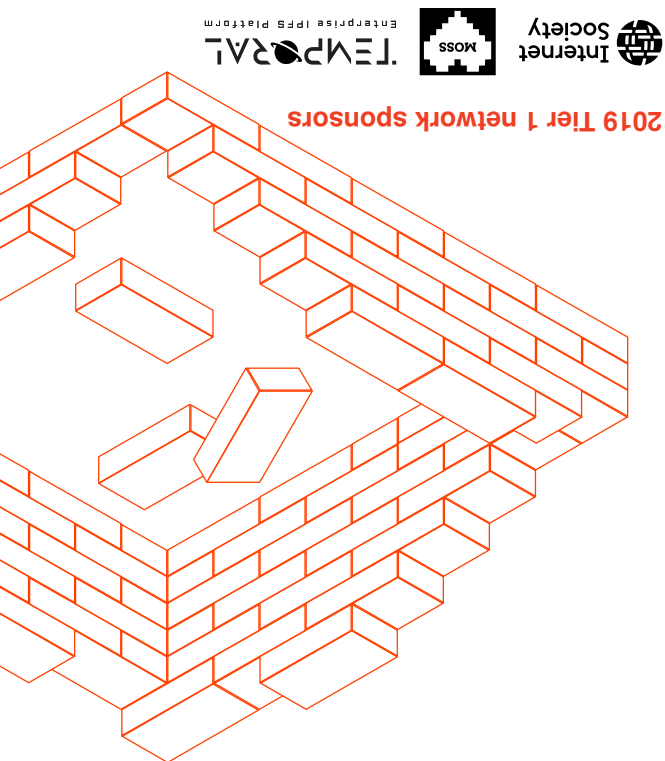
Toronto Media Arts Center  
32 Lisgar Street

## About the conference

RE: Infrastructures explores the collective care and maintenance of alternative networking practices—new protocols, peer-to-peer connections, offline-first computing, and community-based governance.

How can these emerging Infrastructures of ... provide spaces to imagine radically different futures, resist easy co-option by the forces of late-stage capitalism, and work in solidarity as plural networks seeking emancipatory change?

How can our networking be reparative? In what ways can we remediate existing communication infrastructures? Are there uncooptable computing reconfigurations? How can we reconstruct technology after refusal? What are regenerative approaches to resist status quo tech?



2019 Tier 1 network sponsors



# 2019 Program

## Code of Conduct

Our Networks is dedicated to providing a harassment-free environment for everyone, regardless of gender, gender identity and expression, sexual orientation, disability, physical appearance, body size, race, age, religion or technical skill level.

[ournetworks.ca/code-of-conduct](http://ournetworks.ca/code-of-conduct)

## Media policy

The rule of thumb is: Do not photograph, video, or audio record anyone at Our Networks without their express permission, sought in advance.

[ournetworks.ca/filming](http://ournetworks.ca/filming)

## Wi-Fi Experimental Mesh

TMAC  
tmaction

tomesh.net  
<no password>

## Exhibited works

**Made in Iran**  
> Farhad Bahram

**Currency**  
> Sphere Collective

**Channel channel, a network for VPN access**  
> Biyi Wen

**The Magi system, exploring the aesthetics of network infrastructure**  
> Tobias Williams

**Torrents of sex**  
> Nahee Kim

## Outdoor screening

**A Tour of the AC-1 Transatlantic Submarine Cable**  
> Lance Wakeling

**Just Browsing**  
> Joanne McNeil

**After Scarcity**  
> Bahar Noorizadeh

**Geocinema Network**  
> Asia Bazdyrieva, Alexey Orlov, Solveig Suess

**Mechanical Turk Workers**  
> Brett Wallace

## Saturday

	Main Room	Gamma Workshop Space	Zine Library
9:00	Registration		
10:00	Opening remarks		
10:15	Whose future are you serving?: Interrogating frontier imaginaries within P2P technologies > Laniyuk		
10:30	Waiting for NIN in New Orleans > Jennifer Seaman Cook		
11:30	Coffee break		Screenprint our swag
11:45	DHT, BFT, OMG: Know your building blocks for decentralized applications (2019 edition) > Kirill Pimenov		
12:30	Collective resistance to state controls on information > Cecylia Bocovich		
13:00	Lunch		
14:00	Trouble in the bubble: Tech workers organizing in the industry > Danny Spitzberg	Publishing your first decentralized website with Dat > Georgiy Shibaev	Hotglue on Dat workshop for non-techies (kid-friendly!) > Gottfried Haider
16:00	Coffee break		
16:15	Cryptoeconomics: Towards mass behavioral engineering or a network commons? > Jaya Klara Brekke > Dan Hassan	The future for workers > Brett Wallace	
17:00	Social, artistic, and theoretical experiments with decentralized festivals > Andreas Dzialocha		
18:00	Keynote panel: May First, technology and revolution > Alfredo Lopez		
20:00	Outdoor screening		

## Friday

	Main Room	Gamma Workshop Space	Zine Library
12:00	<b>March for our futures: Youth climate march</b> Queen's Park 47 Queen's Park Crescent E		
13:00	<b>Registration</b>		
14:00	<b>Meshing around: DIY internet</b> > Jillian Murphy > Scott Rasmussen	<b>[PROTEST_BAR]</b> > Brett Ian Balogh	
15:00	<b>Hands-on networking</b> > Grant Gallo		
16:00	<b>Screenprint our swag</b>		
:30	<b>Regulationism and the need for a digital postmodernism</b> > Corey Abell		
17:00	<b>Spectacular grammar: Infrastructure as a Universal language</b> > Renée Reizman		
:30	<b>Remaking the web: Competing visions of decentralization</b> > Jack Jamieson		
18:30	<b>Keynote: Dr. Jennifer Wemigwans, A Digital Bundle Protecting and Promoting Indigenous Knowledge Online</b>		
19:30	<b>Kickoff party</b> <b>On the wire</b> > Adam McFillin <b>Pale Eyes</b> > Ben McCarthy		

## Sunday

	Main Room	Gamma Workshop Space	Zine Library
9:30	Registration		
10:15	Building a modern Memex > Andrew Louis	Resistant networks with retro-tech > Libi rose striegl	
10:45	Solar powered website > Marie Otsuka > Lauren Traugott-Campbell		
11:15	Coffee break		Screenprint our swag
11:30	Mesh lightning talks	Radical internet futures: Let's draw them together > Elisabetta Ferrari	
12:15	A technical introduction to IPFS > Hector Sanjuan		
13:00	Lunch		
14:00	Lightning talks	Collaboratively backing up IPFS content with IPFS Cluster > Hector Sanjuan	
15:30	Coffee break		
16:00	Networks as sculpture > Lai Yi Ohlsen	Feedback as exploratory self-research > Sam McGarva	
17:00	Amazonification: Decoding scarcity as weaponized precarity > Hiba Ali		
17:45	Closing remarks		