



CRYPTO
PARTY

Ann Arbor



Digital Privacy during COVID-19

Presented by: Cryptoparty Ann Arbor

<https://a2crypto.party>

Cryptoparty Ann Arbor



Cryptoparty Ann Arbor (Michigan) is a community of privacy-minded educators, techies, activists, and enthusiasts working to help you reclaim your privacy.

We put people first, and see within technology the potential for liberatory social change.

We ARE THE Cryptoparty Ann Arbor!

– <https://a2crypto.party>

Presenter: John Gallias

An educated, experienced, and easygoing information technology administration professional. Able to quickly and effectively articulate complex and important decisions affecting mission-critical operations with an emphasis on security.



I am John Gallias!

– <https://johngallias.com>

TinyURL to This Presentation: tinyurl.com/A2Crypto-COVID-19

Event Expectations

Cryptoparty Ann Arbor events are intended to be inclusive and welcoming for everyone. In particular, we do not tolerate harassment of participants, whether attendees, guests or our staff, in any form. Please see: <https://we.riseup.net/a2cryptoparty/event-expectations>

We may call on some people to provide verbal responses at times. Any participation is entirely voluntary. Please feel welcome to submit written questions. Please let us know if you need any accommodations.

CryptoParty?



CryptoParty is a decentralized movement with events happening all over the world. The goal is to pass on knowledge about protecting yourself in the digital space. This can include encrypted communication, preventing being tracked while browsing the web, and general security advice regarding computers and smartphones.

We are an Ann Arbor collective of CryptoParty, NOT THE CryptoParty!

– <https://cryptoparty.in>



The Electronic Frontier Foundation (EFF) is the leading nonprofit organization defending civil liberties in the digital world. Founded in 1990, EFF champions user privacy, free expression, and innovation through impact litigation, policy analysis, grassroots activism, and technology development. We work to ensure that rights and freedoms are enhanced and protected as our use of technology grows.

WE ARE NOT THE EFF! (But we do love and support them!)

-<https://eff.org>

EFF Logo is a trademark of the Electronic Frontier Foundation.
EFF does not officially endorse or sponsor Cryptoparty Ann Arbor.

Electronic Frontier Alliance

Cryptoparty Ann Arbor is a proud member of the Electronic Frontier Alliance (EFA)!



We are a MEMBER of the EFA, not THE EFA

As a member organization of the EFA, we believe that technology should support the intellectual freedom at the heart of a democratic society. In the digital age, that entails advancing: Free Expression, Security, Privacy, Creativity, and Access to Knowledge

– <https://eff.org/efa>

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COVID-19: SOCIAL DISTANCING IN PUBLIC PARKS AND TRAILS



Do not use parks or trails if you are exhibiting symptoms.



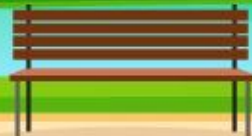
Be prepared for limited access to public restrooms or water fountains.



Share the trail and warn other trail users of your presence and as you pass.

Follow CDC's guidance on personal hygiene prior to visiting parks or trails.

Observe CDC's minimum recommended social distancing of 6' from other persons at all times.



COVID-19 Resources by Region

City of Ann Arbor

- <https://www.a2gov.org/Pages/COVID-19-Information.aspx>

University of Michigan

- <https://coronavirus.umich.edu/>
- <https://www.uofmhealth.org/covid-19-update>

COVID-19 Resources by Region

County

- <https://www.washtenaw.org/3095/COVID-19>

State, Federal, World

- <https://www.michigan.gov/coronavirus>
- <https://www.cdc.gov/coronavirus/2019-ncov/>
- <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>

COVID-19 Resources: Supply Donations

Michigan Medicine

- [U-M asks community to donate gear to protect health care workers and patients from COVID-19](#)

St. Joseph Mercy

- [Coronavirus/COVID-19](#) - How You Can Help - Supply Donations

COVID-19 Resources: Internet

- Internet
 - [Washtenaw County-compiled list](#)
 - Comcast: <https://corporate.comcast.com/covid-19>
 - AT&T: <https://about.att.com/pages/COVID-19.html>

- How Each Carrier is Responding to the COVID-19 Pandemic:
<https://www.letstalk.com/cellphones/news/carrier-response-covid-19-pandemic/>

COVID-19: Clean Your Devices!

- [How to clean your Apple products](#)
- [Clean your Pixel phone](#)
- [Keep coronavirus off your phone: How to clean your phone the right way](#)
- [CDC: Preventing the Spread of Coronavirus Disease 2019 in Homes and Residential Communities](#)
 - Clean all “high-touch” surfaces, such as counters, tabletops, doorknobs, bathroom fixtures, toilets, **phones, keyboards, tablets**, and bedside tables, **every day**

COVID-19 Resources Continued

- [EFF: COVID-19 and Digital Rights](#)
- [Don't Panic: The comprehensive Ars Technica guide to the coronavirus](#)
- [The Internet is drowning in COVID-19-related malware and phishing scams](#)
- [Phishing in the Time of COVID-19: How to Recognize Malicious Coronavirus Phishing Scams](#)
- [Harden Your Zoom Settings to Protect Your Privacy and Avoid Trolls](#)

COVID-19 Resources Continued

Pacific Coast Drapery Manufacturing

- <https://www.pacificcoastdrapery.com/shop>
- Protective Face Masks
- Not intended for clinical use and must be laundered
- I have personally ordered 3 packs of 3 masks, for a total of 9 masks.
- Took 6 days for USPS delivery
- Very high quality, reusable, great fit

COVID-19 Resources Continued

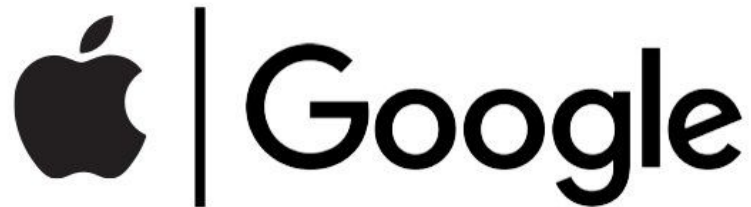
Toilet Paper, Paper Towels, Hand Sanitizer

- [/r/AnnArbor New Grocery Store Megathread](#)
- Kroger on Maple generally has 12-pk Angel Soft and 6-pk of Kroger Paper Towels with limit 2 each first thing when they open 8AM
- Plum Market on Maple generally has single and 6/12-pk of paper products
- Meijer in Scio on Jackson Rd had travel-sized sanitizer during my last visit, limit 2 each.
 - Also had disposable surgical masks, but I got the last two boxes!

COVID-19: Physical Security

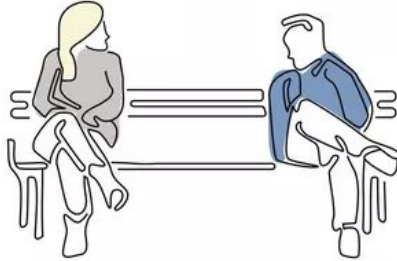
- Use Webcam Covers to make sure your camera is blocked.
- Malware may be able to record without the light!
- Some video-conferencing software can force your camera on!
- Virtual Backgrounds can be FUN, but they shouldn't be considered a safe replacement for making sure your physical surroundings are meeting friendly.
- Screen Sharing vs. Remote Control

COVID-19: Contact Tracing



- Apple: [Privacy-Preserving Contact Tracing](#)
- Google: [Apple and Google partner on COVID-19 contact tracing technology](#)

Alice and Bob meet each other for the first time and have a 10-minute conversation.

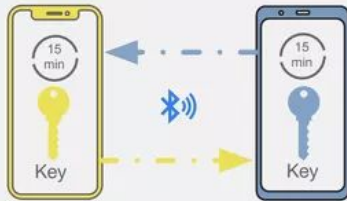


Bob is positively diagnosed for COVID-19 and enters the test result in an app from a public health authority.



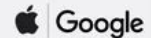
A few days later...

Their phones exchange anonymous identifier beacons (which change frequently).



With Bob's consent, his phone uploads the last 14 days of keys for his broadcast beacons to the cloud.

Apps can only get more information via user consent



Alice continues her day unaware she had been near a potentially contagious person.



Alice sees a notification on her phone.



Sometime later...

Alice's phone periodically downloads the broadcast beacon keys of everyone who has tested positive for COVID-19 in her region. A match is found with the Bob's anonymous identifier beacons.



Anonymous identifier keys are downloaded periodically



A match is found

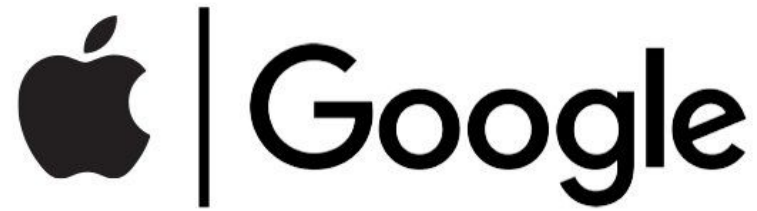
Alice's phone receives a notification with information about what to do next.



Additional information is provided by the health authority app or website



COVID-19: Contact Tracing



- Apple | Google: [Frequently Asked Questions](#)
- EFF: [Apple and Google's COVID-19 Exposure Notification API: Questions and Answers](#)

COVID-19 & The Basics

- When it comes to Digital Privacy, most recommendations are the same regardless of COVID-19:
 - Backups
 - Updates
 - 2 Factor Authentication
 - Password Managers

Basics - BACKUPS



The **3-2-1 rule of backups**:

3 – Keep 3 copies of any important file: 1 primary and 2 backups.

2 – Keep the files on 2 different media types to protect against different types of hazards.

1 – Store 1 copy offsite (e.g., outside your home or business facility).

<https://www.backblaze.com/blog/the-3-2-1-backup-strategy/>

You may need to Save As / Export / Download your data, especially if using Cloud services such as Google, Office 365, etc.

Cryptoparty Ann Arbor Links - Backups

<https://we.riseup.net/a2cryptoparty/links#backups>

Basics - UPDATES



UPDATE YOUR SOFTWARE?

NOW

LATER

Software Updates and Why They're Important

“Keep your software updated!” is the closest thing we have to security advice that will work for everyone. By keeping your software up to date at all times, you’re staying one step ahead of all but the most advanced threats.

<https://sec.eff.org/articles/software-updates>

Updates: smaller, more frequent, bug and security fixes (1.0 to 1.1)

Upgrades: larger, less frequent, new features (1.0 to v2.0)

Cryptoparty Ann Arbor Links - Updates

<https://we.riseup.net/a2cryptoparty/links#updates>

Basics - 2FA & PASSWORDS

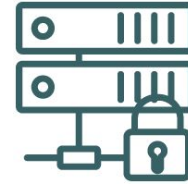


2FA - 2 Factor Authentication:

- Enable 2FA in as many places as you can: <https://authy.com/guides>
- Google Authenticator: Use **Authy** or **DUO Mobile** instead for **backup**

Passwords:

- Use **different** passwords **every account**
- **Generate** (don't THINK of) passwords if at all possible using:
 - a. **A Password Manager**: LastPass, 1Password, Dashlane, KeePassXC, Blur, etc.
 - b. **Diceware** is great for sharing, memory, and typing: <https://www.eff.org/dice>
- A paper notebook ***with strong physical security*** can work great until you can start using a Password Manager.



Extra Time

Now that we've completed the lesson (and have some additional time!), we can continue the discussion of today's topic and/or go into others.

Examples:

- Privacy Apps / Services (Extra Slides!)
- Security Plan (Threat Model / Risk Assessment)
- Two-factor Authentication
- Password Managers
- Secure Messaging

Thanks / Feedback / Getting Involved

Whether you're simply curious or want to start a technical revolution, we encourage you to get in touch with us physically or electronically. The only time conditions change is when we band together to change them.

- a2crypto.party: Our website.
- [E-mail](mailto:cryptopartyannarbor@riseup.net): cryptopartyannarbor@riseup.net
- [Discussion List](https://autistici.org/mailman/listinfo/cryptoparty-ann-arbor):
<https://autistici.org/mailman/listinfo/cryptoparty-ann-arbor>
- [Announcements](https://lists.riseup.net/www/info/cryptoparty-a2-announce):
<https://lists.riseup.net/www/info/cryptoparty-a2-announce>
- [Twitter](https://twitter.com/CryptopartyAA) - @CryptopartyAA
- [Facebook](https://www.facebook.com/a2crypto) - a2crypto

Cryptoparty Ann Arbor - Links



Curated list of recommended links, resources, apps, services, etc.

- <https://we.riseup.net/a2cryptoparty/links>

Firefox (by Mozilla)



Firefox products are designed to protect your privacy:

- <https://www.mozilla.org/en-US/firefox>

Firefox Personal Data Promise: Take less. Keep it safe. No secrets:

- <https://www.mozilla.org/en-US/firefox/privacy>

One login. All your devices. A family of products that respect your privacy:

- <https://accounts.firefox.com>

Firefox Mobile / Focus



Firefox Mobile (iOS / Android)

- <https://www.mozilla.org/en-US/firefox/mobile/>
- Super fast. Private by default. Blocks 2000+ online trackers.

Firefox Focus (iOS / Android)

- <https://support.mozilla.org/en-US/products/focus-firefox>
- You can use Firefox Focus as a standalone browser or as content blocker for Safari on iOS

Firefox Facebook Container



Firefox

<https://www.mozilla.org/en-US/firefox/facebookcontainer/>

- Facebook can track almost all your web activity and tie it to your Facebook identity. If that's too much for you, the Facebook Container extension isolates your identity into a separate container tab, making it harder for Facebook to track you on the web outside of Facebook.
- Facebook will still be able to send you advertising and recommendations on their site, but it will be much harder for Facebook to use your activity collected off Facebook to send you ads and other targeted messages.

Multi-Account Containers



<https://support.mozilla.org/en-US/kb/containers>

- Just like the Facebook Container but for Personal, Work, Banking, Shopping, etc.
- Container tabs are like normal tabs except that the sites you visit will have access to a separate slice of the browser's storage.
- This means your site preferences, logged in sessions, and advertising tracking data won't carry over to the new container.
- Likewise, any browsing you do within the new container will not affect your logged in sessions, or tracking data of your other containers.

Browser Add-ons, Extensions

Privacy Badger

- <https://www.eff.org/privacybadger>

HTTPS Everywhere

- <https://www.eff.org/https-everywhere>

uBlock Origin

- <https://github.com/gorhill/uBlock>



Privacy Badger



Jumbo



Free iOS / Android service that connects to your social media accounts and helps you manage posts and privacy settings.

- <https://jumboprivacy.com>
- Available Apps: Facebook, Facebook Messenger, Google, Gmail, YouTube, Google Maps, Google Chrome, Data Breach (E-Mail Address), Twitter, Amazon, Alexa

Umbrella Security



Free digital and physical security advice App

- <https://secfirst.org/umbrella>
- Feeds, Forms, Checklists, and Lessons:
 - Lesson for Online Privacy
 - Beginner: I want to ensure my privacy when using social media
 - Advanced: I need to stay anonymous online.
 - Other Lessons:
 - Assess Your Risk, Information, Communications, Travel, Work, Incident Response, Stress, Emergency Support, Tools
 - Forms: Digital Security Incident, Physical Security Incident, Proof of Life Form, Travel Security Memo

iVerify

Paid (\$2.99) iOS App that monitors your device security, notifies you when an issue is detected, and provides actionable steps to take to mitigate any risks.

- <https://iverify.trailofbits.com>
- Checklists include:
 - Protect against theft
 - Limit software exploits
 - Prevent data leakage
 - Review for signs of compromise
 - Use good security software
 - Secure your online accounts
 - Network security (Advanced)

Abine Blur



<https://www.abine.com>

- Free: Encrypted Passwords (Password Manager), Masked Emails, Tracker blocking, Auto-fill
- **Premium (PAID):** Masked Cards (virtual cards), Masked Phone, Backup & Sync

Abine DeleteMe

<https://joindeleteme.com>

- ***PAID SERVICE*** DeleteMe removes your personal information like name, address, age, phone number, email address, and photos of your home from leading data broker sites. Removing personal information from data broker websites reduces your online footprint, and removes Google search results.

Free DIY Opt-Out Guide (can be very tedious & time consuming!):

- <https://joindeleteme.com/help/diy-free-opt-out-guide/>

Security Checklist



Security Checklist

<https://securitycheckli.st>

- An open source checklist of resources designed to improve your online privacy and security.
- Check things off to keep track as you go.
- A beginner's checklist for staying safe on the internet.

[Security Checklist Habicia Challenge](#)

PrivacyTools

<https://www.privacytools.io>

- We provide services, tools, and knowledge to protect your privacy against global mass surveillance, and moderate a thriving community of privacy-minded individuals like yourself to discuss and learn about new advances in protecting your online data. This website serves as the centerpiece of our organization, where we research and recommend various software solutions for our community.