

Shoot First, Ask Questions Later

The U.S. Maker Response to COVID-19

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~ % whoamitho

Sr. Researcher, Trainer, & AppSec Engineer for GRIMM

More applicably, this guy:

The image is a collage of three news articles from different websites, each featuring a story about 3D-printed TSA master keys.

CSO (Top Right): The headline is "SALTED HASH- TOP SECURITY NEWS". It is written by Steve Ragan, Senior Staff Writer, CSO, on July 23, 2016, at 9:00 PM PDT. The article discusses hackers creating Safe Skies TSA master keys from scratch and publishing designs.

GIZMODO (Left): The headline is "You Can Now 3D-Print Your Own TSA Master Keys". It is written by Adam Clark Estes on September 11, 2015, at 4:33 PM, filed under SECURITY. The article includes a technical diagram of a key with dimensions (50.64 mm and 14 mm) and a photograph of several blue 3D-printed TSA master key blanks.

engineering.com (Bottom Right): The headline is "Hacking the TSA's Master Keys: 3D Printing Adds a New Dimension to Privacy and Security". It is part of the BIM section and includes a sidebar with a graph showing popularity over time.

What's Going on ?

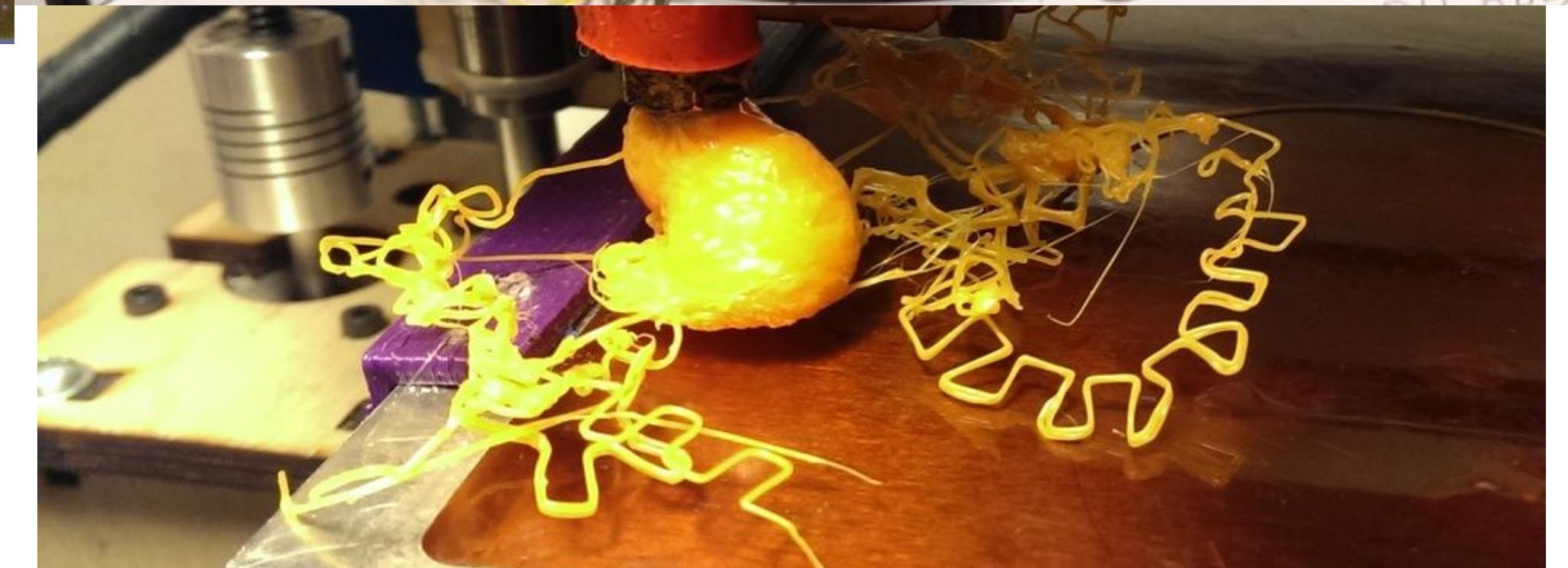
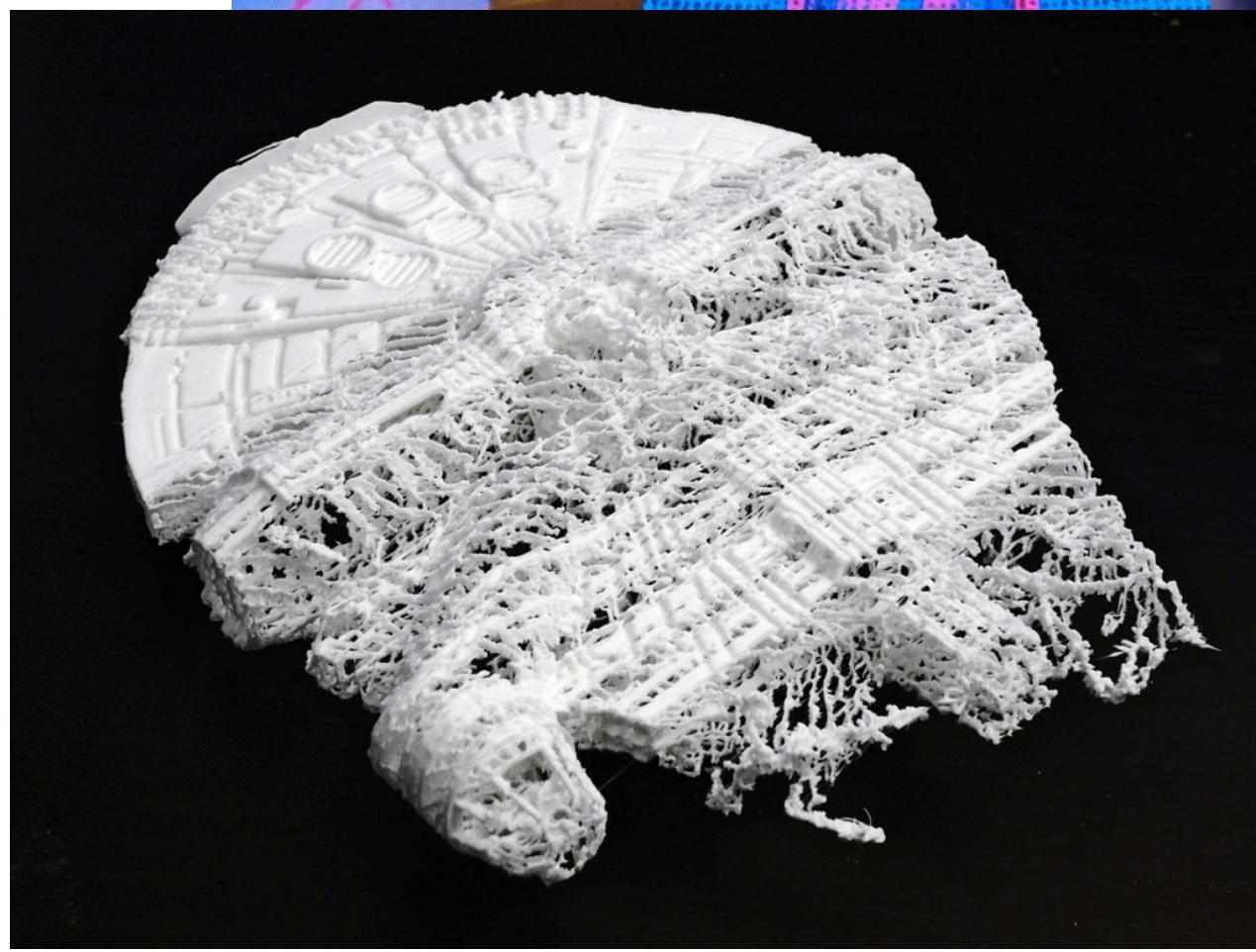
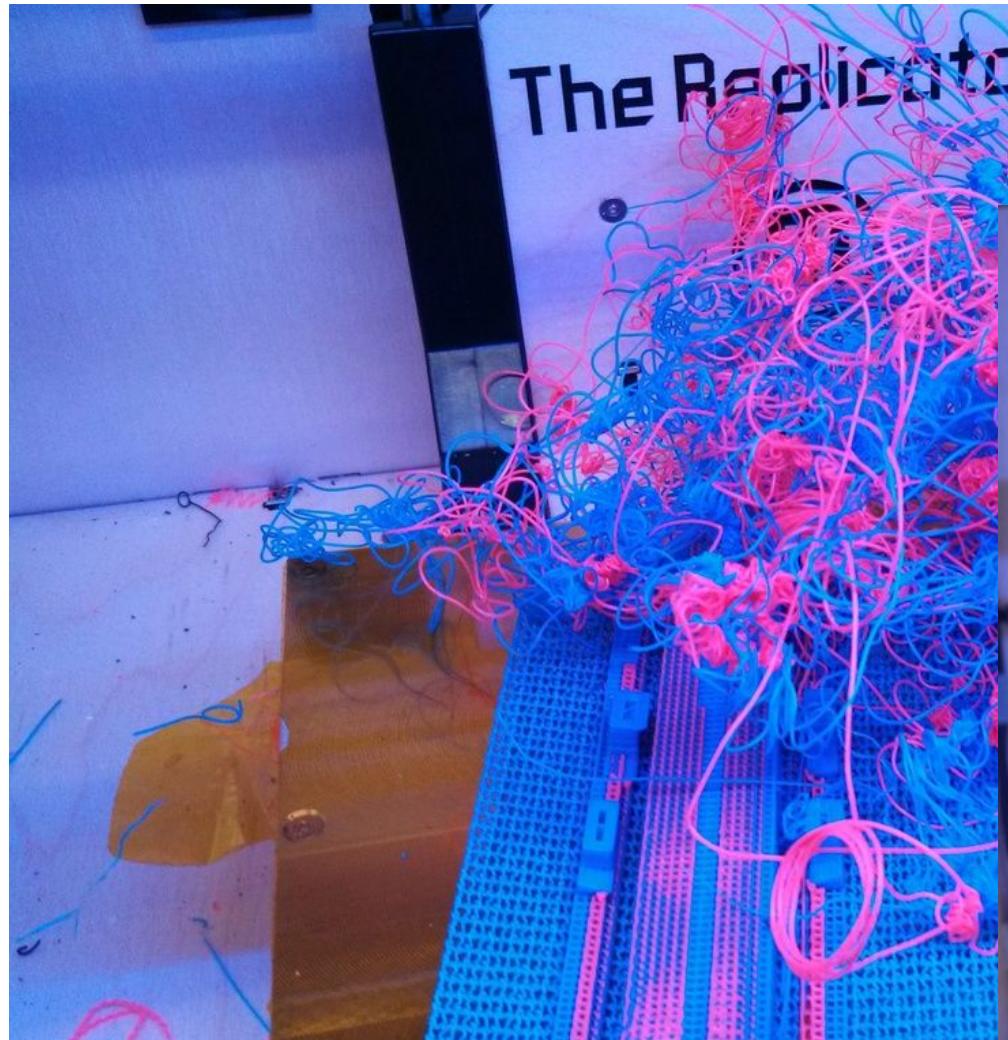


The US did not have a proper plan in place for a Pandemic

Mass production of PPE (or most anything) is a balance and can't shift rapidly

“Any port in a storm” leads to repurposing of rapid prototyping systems

Isn't 3D Printing Perfect, Futuristic Magic?



Isn't 3D Printing Perfect, Futuristic Magic?

Affected by environmental factors

Difficult to make durable goods

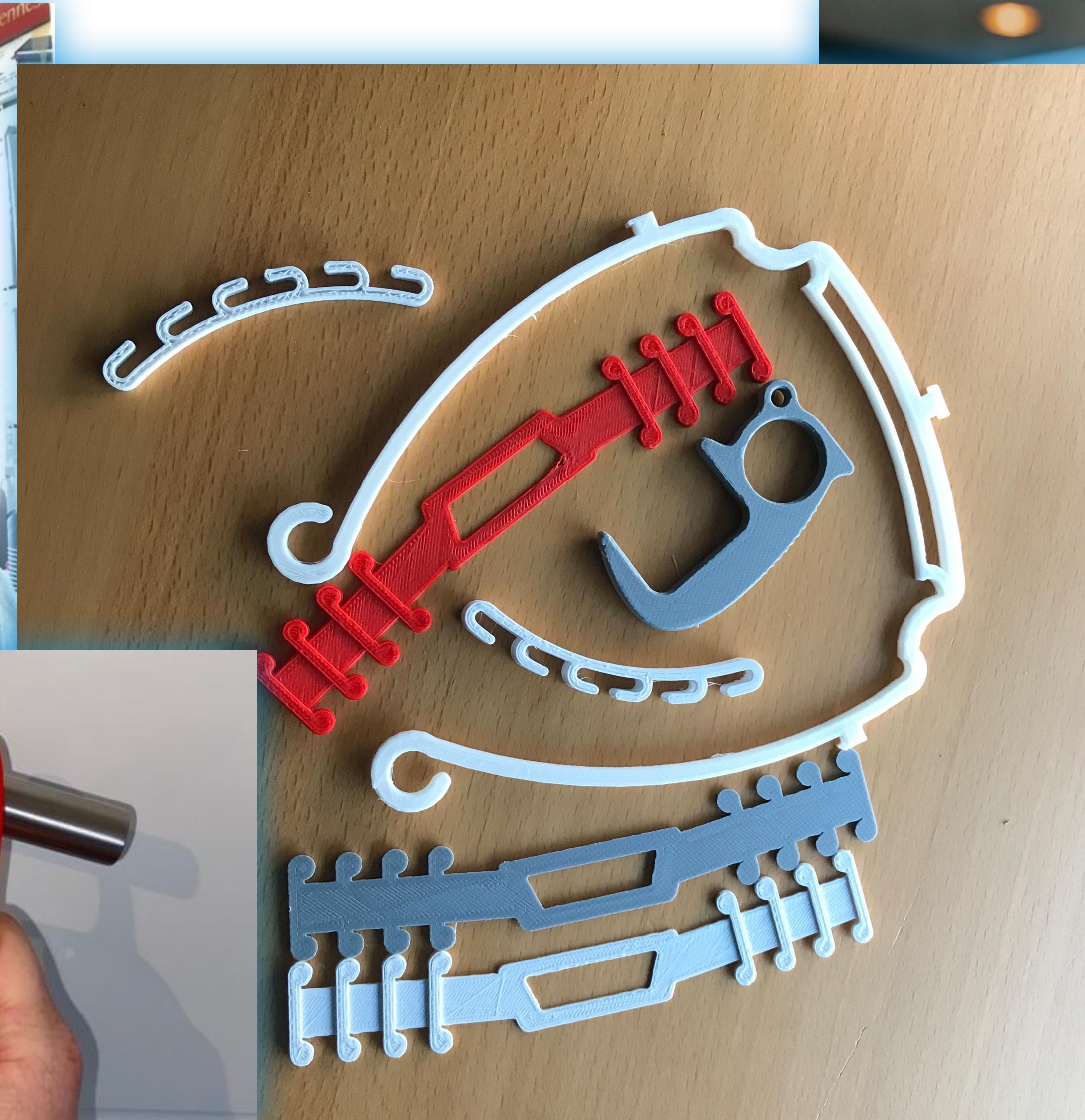
EXTREMELY SLOW

See also: TSA Keys

...and yet, WE'RE DOING IT!



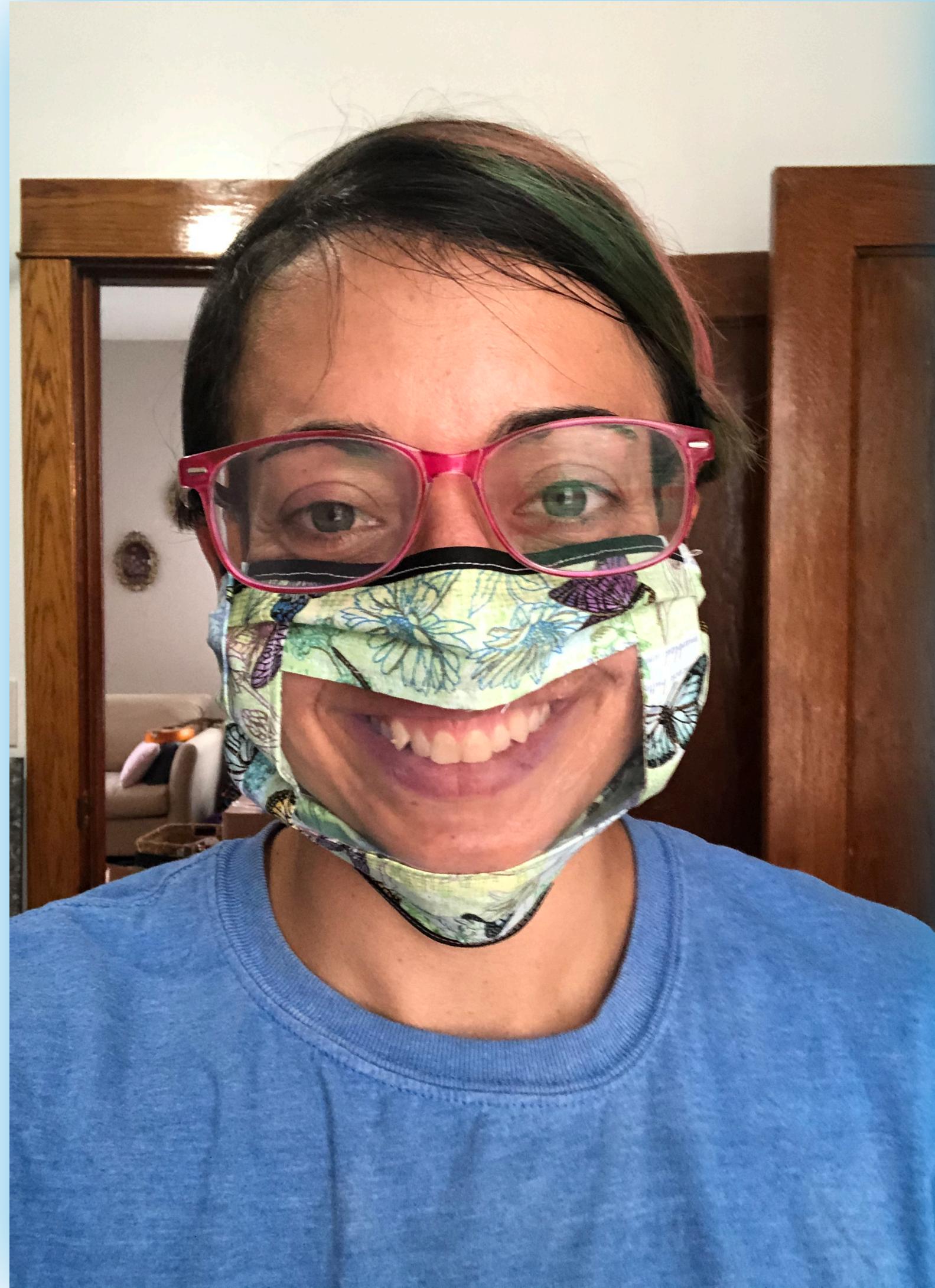
...and yet, WE'RE DOING IT!



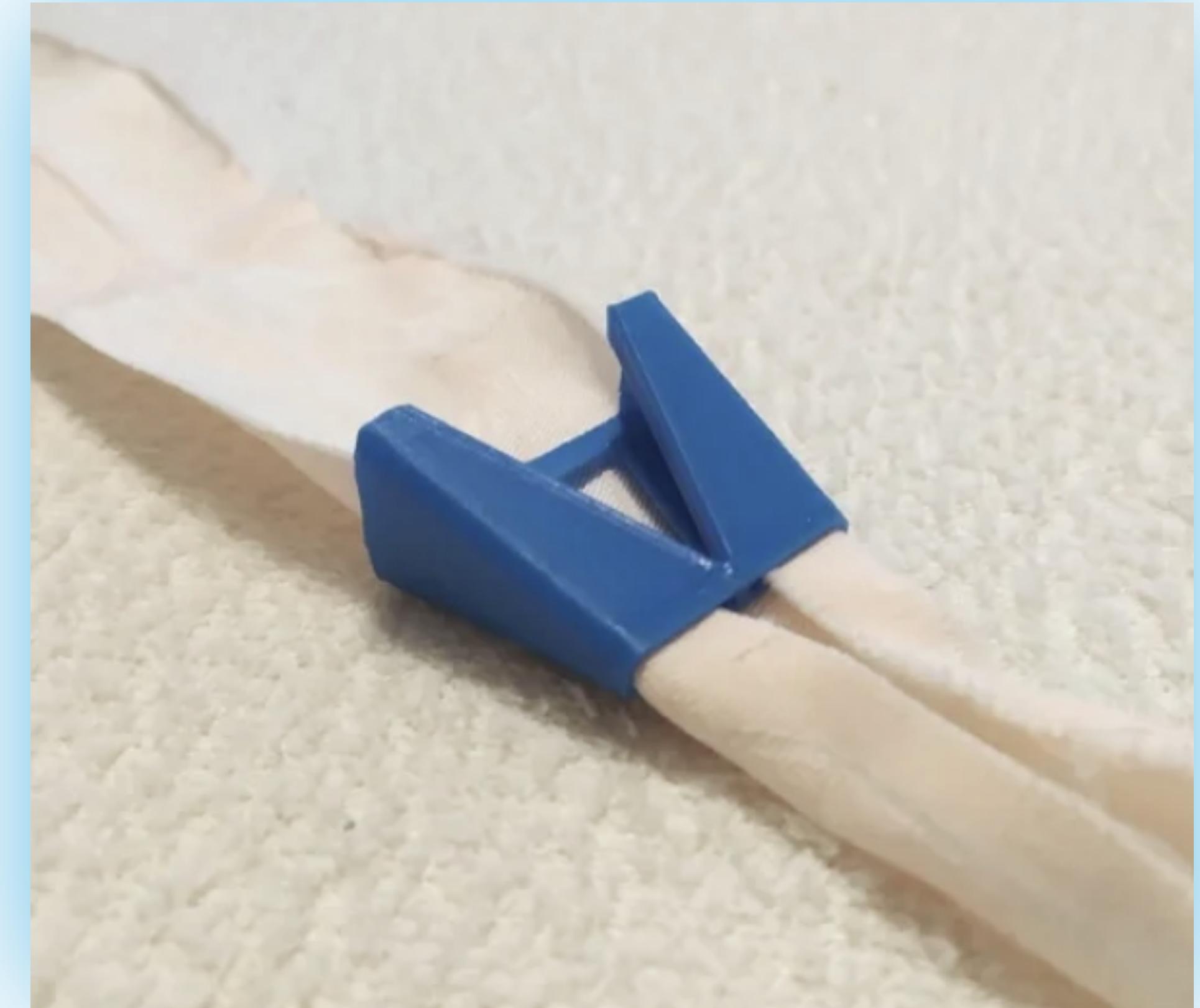
...and so are they!!



...and they!!



...and working together!!



Tower of Babel

Social Media = 140,000 groups, all vying to be The One

Slacks Slacks Slacks Slacks Slacks Slacks Slacks Slacks

Endless Unanswered Google Forms

Hoarding of materials

Production of PPE which shouldn't be used

See the title of this talk

“From Chaos, Comes Order”

- Nietzsche

Prusa & 3DVerkistan issue strong designs that are fast to print.

NIH certifies designs for use, hosts 3D designs repo

Makers devise methods of greatly increasing prod speed

See also: low-tech makes!

“Cloth” wearables are easy enough for beginners to make

Concise PDFs and “Infographics” achieve mass circulation

“From Chaos, Comes Order”

- Nietzsche

Hackerspaces & Internet stars put huge # of printers to work

Retail outlets donate materials

Some manufacturers selling pro PPE at cost

Community continues to tweak 3D models and invent new
wearables

Where are we Now?

State & Municipal entities purchasing price-gouged PPE direct from China

Distribution is terrible

Non-hospitals are all universally ignored

Hospitals continue to turn away donated PPE

Too much 3D printing, not enough everything else

Muggles don't know how SARS-CoV-2 even spreads

More Info / How can you Help?

3D Printing not really needed currently (locally, perhaps)

GetMePPEChi.org if you have or need PPE, or want to donate \$

Masks For Docs Slack: <https://tinyurl.com/masksfordoctors>

Join applicable channels, READ THE PINNED POSTS

GREAT time to learn to sew

Get on the horn. You may be the first coordinator.

Shuttle around your community.

FB / Reddit groups / Neighbor apps

Hackerspaces

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