

OwnYourCam

Open Source Webcam Controller for Video conferences

Vinh Ngu & Florian Nehmer

WHO WE ARE



Florian Nehmer

Student M.Sc. Informatics
University of Hamburg

Freelance Web Developer
Focus on IT Security



Vinh Ngu

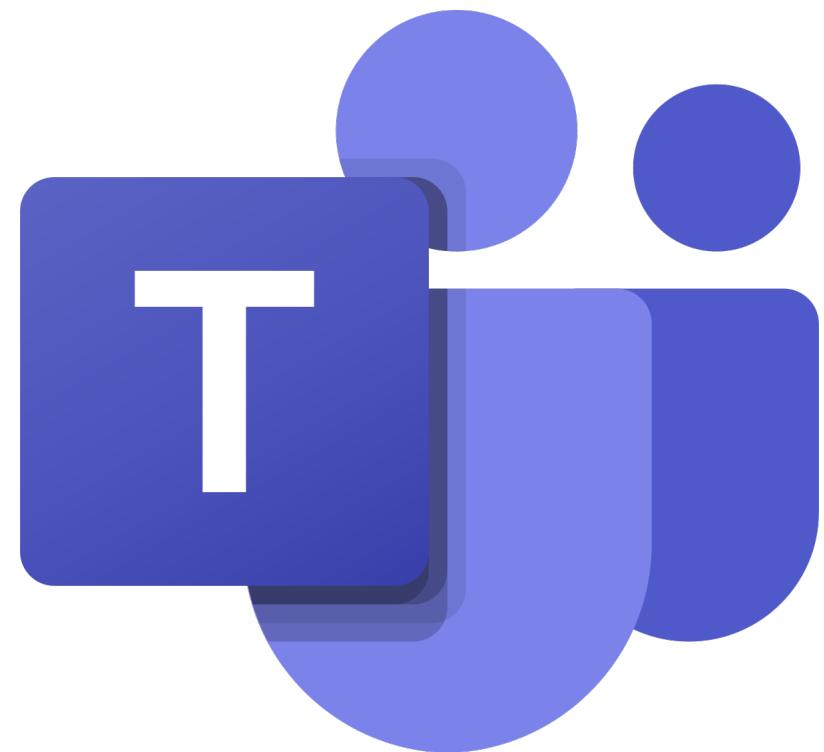
Student M.Sc. Informatics
University of Hamburg

Software Engineer
Focus on DevOps and AI

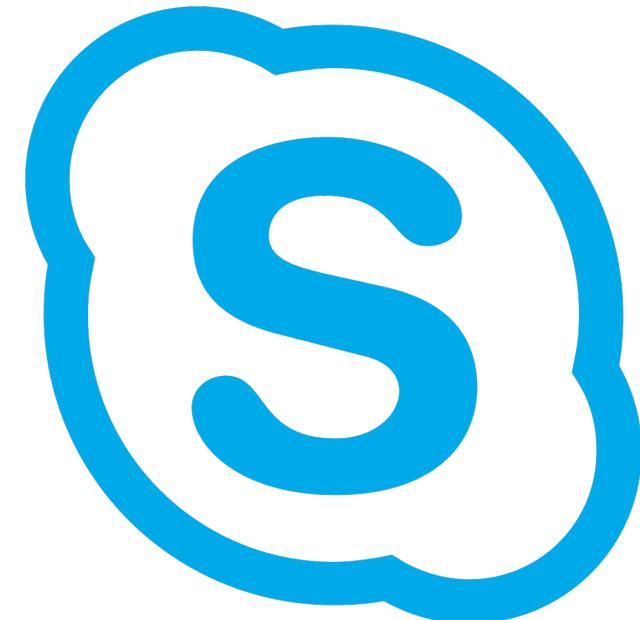
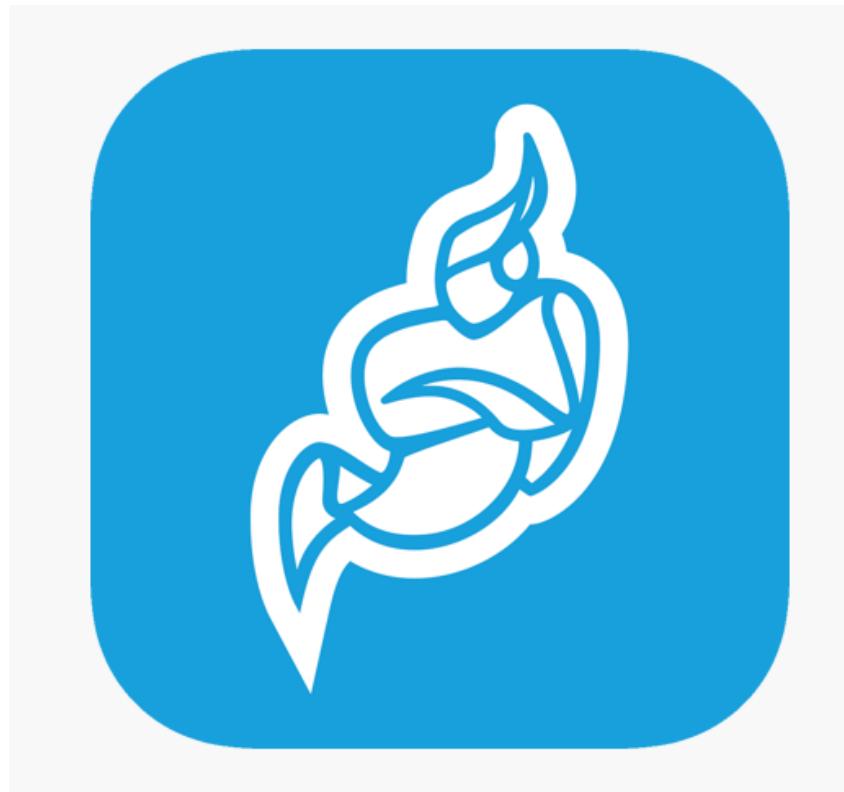
Video Conferences Nowadays...



A lot of tools...



Webex Meetings



Can you trust them all?

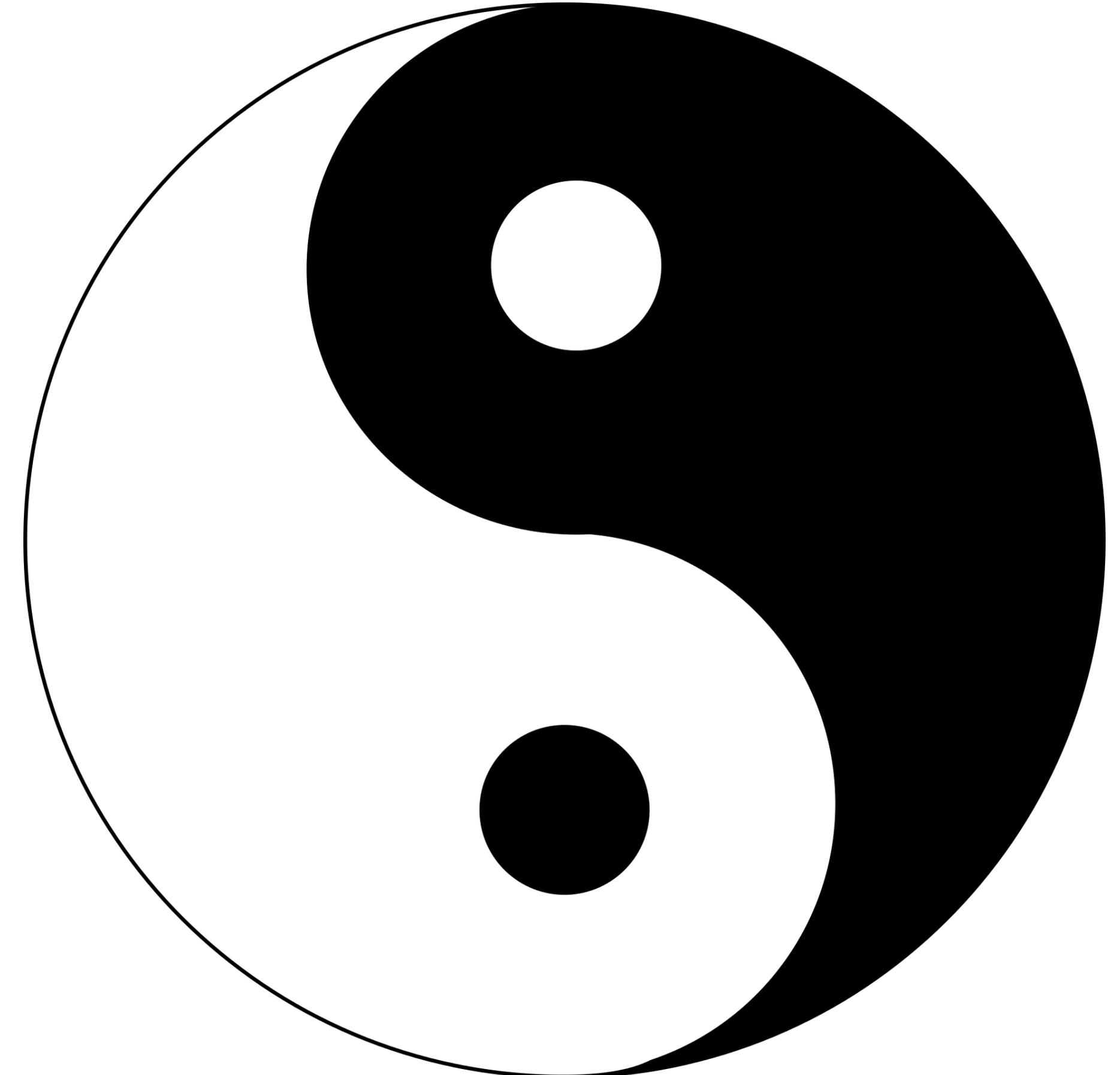
Zoom

- „But security researchers have called Zoom “**a privacy disaster**” and “**fundamentally corrupt**” as allegations of the company mishandling user data snowball.“
- <https://www.theguardian.com/technology/2020/apr/02/zoom-technology-security-coronavirus-video-conferencing>



Inspiration

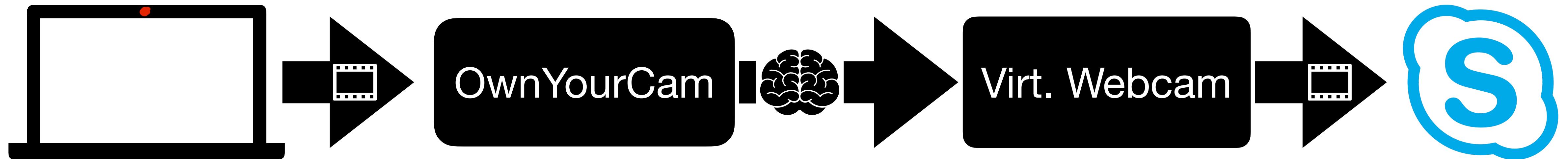
- Zoom Privacy issues :-(
- Zoom Virtual Background :-)



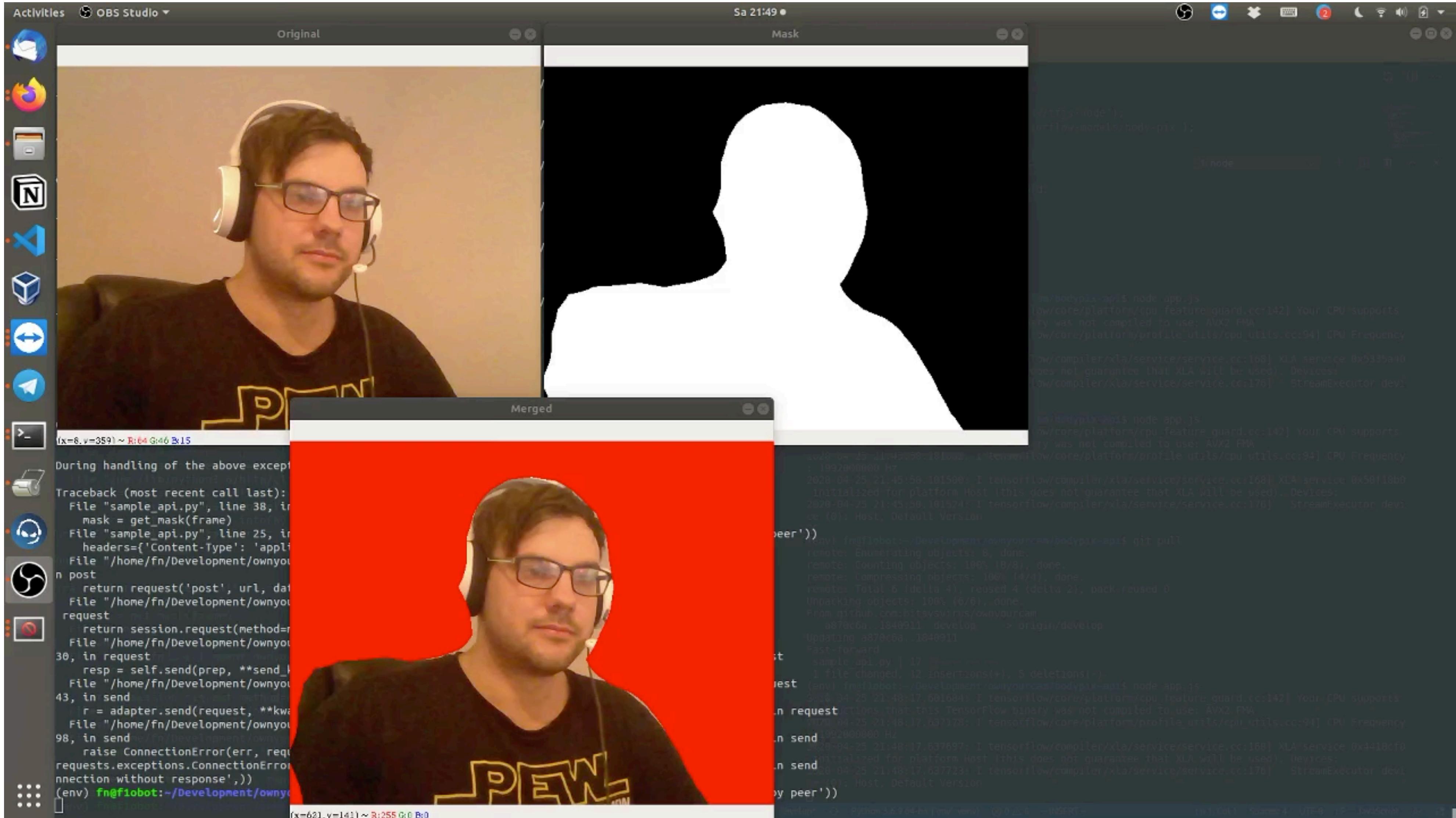
OwnYourCam

- Prototype
- Open Source
 - <https://github.com/bitsvsvirus/ownyourcam>
- Webcam Controller
- Virtual Webcam
- Virtual Backgrounds

Webcam Controller - Interception - Processing



Powered by AI



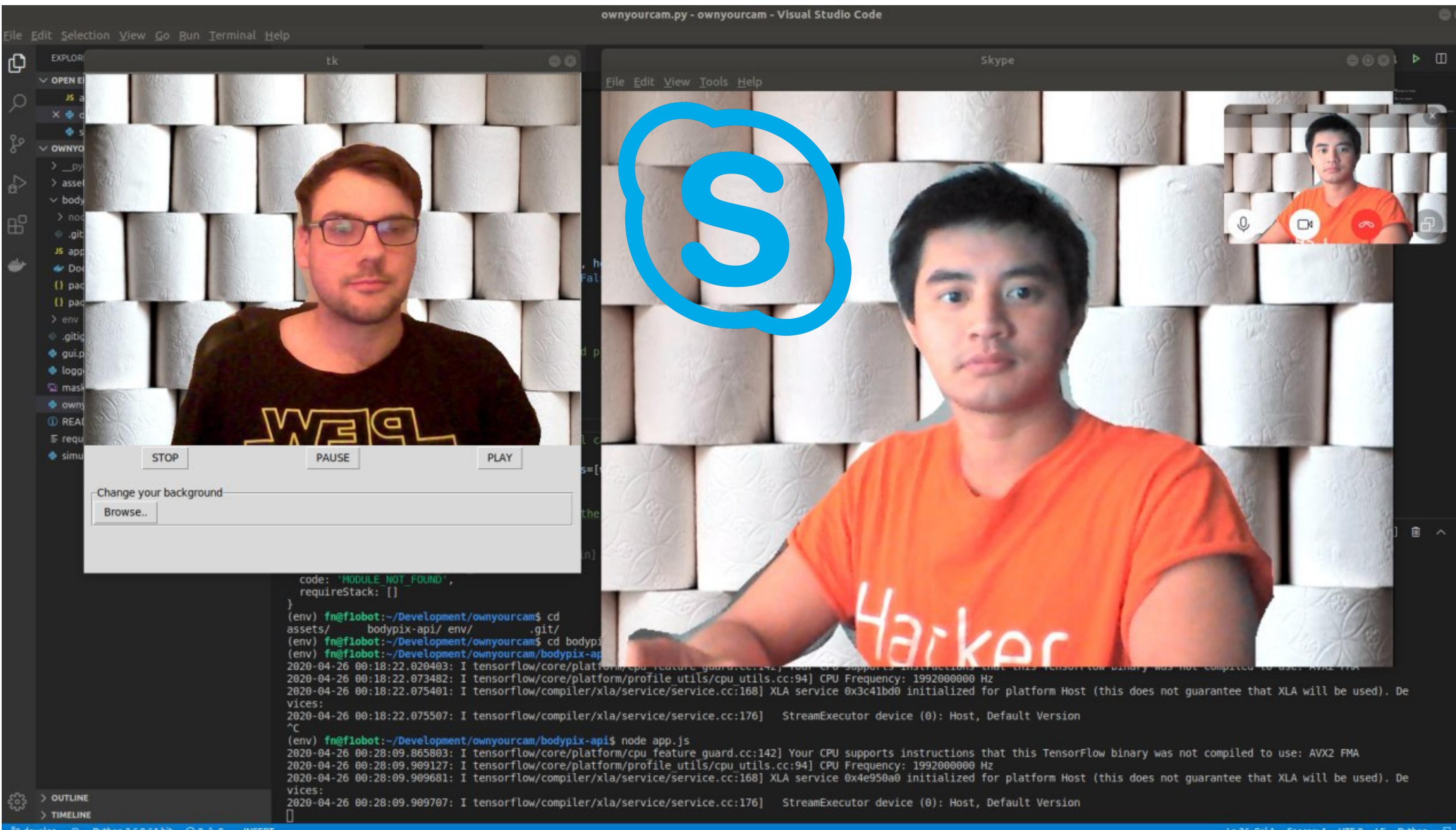
State of Development

- In the last 2 days we created our prototype from scratch. It includes:
 - OS: Deb-based Linux
 - Creation of virtual webcam
 - AI powered Virtual Background feature
 - Webcam preview UI

Future Plans

- Support MacOS and Windows
- Easy corporate identity background creator
- More on-the-fly controls like:
 - Pause/Play Video
 - Show black screen button
 - Loopback function, like in the hacker movies :-)

Example Skype



Thank you for your attention!



<https://github.com/fnehmer>



<https://github.com/quving>