## **Case Studies**

Several of the completed projects for NGI\_Trust have worked with us to create case studies on the projects, their outcomes and their impact. These are available below.

- CAP-A
- PY Protect Yourself
- ISIBUD
- Deep-LearningSID-SOC
- MidPrivacy
- MedIAM

- CASPER & CASPER 2.0
  FAIR-AI & FAIR-AI 2.0
  MW4ALL & MW4ALL 2.0
- Keyn & Keyn 2.0 (Chiff)

Project	Call	Description	Case Study Materials
CAP-	First	FORTH and IN2 were funded to deliver the CAP-A project in the first call from NGI_Trust.  Solid legal regulations and technical countermeasures are not always sufficient to achieve society-wide impact on privacy protection; data protection can also be powered by the society itself. The CAP-A project is offering socio-technical tools to promote collective awareness and informed consent, whereby data collection and use by digital products are driven by the expectations and needs of the consumers. Theme-driven events aimed at rating the privacy friendliness of apps of specific categories and at annotating their Privacy Policy documents have helped us generate informative statistics about the behaviour and mindset of citizens and the privacy-consciousness of mobile apps.	NGI_Trust casey Awareness.pdf
			GEANT_CONNECTngle_page.pdf

PY -	First call	PANGA was funded to deliver the PY project in the first call from NGI_Trust.	
Prote ct Yours elf		PyGuard is a cybersecurity project that protects individuals from online tracking. In the past decades, Big Tech companies have developed business models relying on the sale of our personal data. However, they represent a risk for our privacy, our freedom of choice and free-will, due to targeted ads, news and sponsored content. Furthermore, phishing and cyber attacks are increasing, while we introduce more and more numerous yet vulnerable connected devices into our homes.	NGI_Trust Case sivacy online.pdf
			GEANT_CONNECTngle_page.pdf
ISIBUD	First call	Better Internet Search Ltd, UK was funded to deliver the ISIBUD project in the first call from NGI_Trust.	
		Better Internet Search Ltd (BIS) was founded with the aim of developing a more user-focused search engine, where personal data does not need to be gathered centrally and the user has inherent privacy and control of their data.  The success of this project has led to the search engine being publicly released as an MVP and it continues to be developed by the company partly supported by a second grant from NGI_Trust. A future release with blockchain - used to secure the token-based economy - is planned for summer 2021.	NGI_Trust case sIBUD Project.pdf

## Deep-Learni ng

First call

Sensifai was funded to deliver the Deep Learning project in the first call from NGI\_Trust.

There are many image enhancement apps that improve the quality of images or edit them automatically through advanced artificial intelligence. These apps work based on deep-learning that is computationally heavy and requires strong GPU servers, and as such they require users to send their images to their cloud to process them. This increases the risk of getting hacked, exposed, or abused and potentially violates the privacy of millions of users.

SensifAl developed specific deep learning architectures for the new NPU chipsets of most major smartphone manufacturers, together with an on-device smart-enhance app, that allows users to enhance images and videos locally on their mobile phone, while guaranteeing control over their personal data.



NGI\_Trust case s...ving privacy.pdf

## SID-SOC

Secon d call 7Signals was funded to deliver the SID:SO&C / SensioID project in the second call from NGI Trust.

Sensio is open-source software for content creators (for now, mainly, photographers) to manage, protect and license their work. Simple, transparent and secure.

In the long run, Sensio's goal is to form a creative market where content creators are not bound to any platform and can set the terms for others to use their work without much effort. Where publishers, marketers and other creatives can acquire quality content directly from its authors in a few clicks.

As the first step towards this ambitious goal, within the scope of NGI Trust, the project has developed a tool that will help photographers to stay in charge of their work while publishing and sharing photos online.



NGI\_Trust Case S...ative market.pdf



GEANT\_CONNECT...ngle\_page.pdf

## Secon Evolveum was funded to deliver the MidPrivacy project in the second call from MidPr ivacy MidPoint (MidPrivacy's solution) is the leading open-source identity management and governance platform. With its rich feature set, this unconventional system gives organizations full control over identity data, making sure they are copied, synchronized and shared according to the policies. MidPoint is designed to improve information security, automate and improve error-prone activities, enabling organizations to proceed in digital transformation. NGI\_Trust case s...a protection.pdf MedIAM Third call Fabien Imbault was funded to deliver the MedIAM project in the third call from NGI\_Trust. According to cybercrime magazine, "healthcare suffers 2-3X more cyberattacks than the average amount for other industries" because the data has more value for hackers. Cyber regulations such as the EU cybersecurity act provide mandatory requirements to protect sensitive information and systems. In the current proposal, we provide an open-source pilot implementation on how an equipment vendor should protect the functions and data of their medical IoT NGI\_Trust case s... IoT devices.pdf University of Belgrade - School of electrical engineering was funded to deliver **CASP** the CASPER & CASPER 2.0 project in the first and third call from NGI\_Trust. ER & Third Privacy also means protection from threats that we are (still) unable to fight call **CASP** effectively. That's why vulnerable groups of Internet users, including children and **ER** elderly people, need their privacy to be respected. 2.0 The main aim of the CASPER project was to develop an application-agnostic solution based on AI for filtering inappropriate content from online communications, to protect children and other vulnerable groups of users. NGI\_Trust case s...line threats.pdf

FAIR- AI & FAIR- AI 2.0	Secon d & Third call	The University of Cambridge - School of electrical engineering was funded to deliver the FAIR-AI & FAIR-AI 2.0 project in the second and third call from NGI_Trust.  One of the pressing questions in contemporary AI, is how to make sure that its implementation is fair. But what is it that makes an act fair or unfair, and is it possible to program an AI to be able to detect and use 'social responsibility' as humans do?  The FAIR-AI project worked on the development of a 'fairness vector' allowing AI to read sentences and score their fairness.	NGI_Trust case snts of texts.pdf
MW4 ALL & MW 4ALL 2.0	Secon d & Third call	Least Authority was funded to deliver the MW4ALL & MW4ALL 2.0 projects in the second and third call from NGI_Trust.  The two MW4ALL projects aimed at creating a viable product that can facilitate easy, fast and secure file transfers between two consenting devices. The Magic Wormhole protocol allows two parties to transfer files using a simple code, rather than personal data like an email address or username.  The MW4ALL projects investigated whether this open source technology can be scaled and commercialised without compromising on security or privacy. In the MW4ALL 2.0 project, we adapted the technology for web usage, developed an alpha version of the file transfer app, conducted rounds of user testing and further narrowed down a sustainability model. In doing so, we have created an application that makes secure and privacy-conscious file transfers accessible for everyone, which we will later release as a consumer product.	NGI_Trust case sle transfers.pdf
Keyn & Keyn 2.0 (Chiff)	First & Third call	Keyn B.V. (Chiff) was funded to deliver the Keyn & Keyn 2.0 projects in the first and third call from NGI_Trust.  Password authentication has been the primary mean of authentication for web applications since the early days of the Internet, but it suffers from both security and usability issues. One of its most promising alternatives – WebAuthn – still lacks instead in adoption from both end-users and website owners.  With NGI_Trust support, Chiff developed a hybrid authenticator supporting a variety of existing authentication methods, such as WebAuthn, in a uniform Ulflow for the user.	NGI_Trust cased passwords.pdf