

PRESS KIT

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PYGUARD

RECLAIM YOUR PRIVACY



fondation
MAIF pour la
recherche



www.pyguard.fr/en





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The Context

With the advent of the Internet, we are used to using many "free" digital services offered by the so-called « Big Techs ». These services are not free, we are simply not the customers but the products: their business models are based on the personal data of their users and targeted advertising.

Europe has missed the data market and is now facing a massive data leakage of its citizens and companies to GAFAMs and BATXs.

Today, the European Union is showing a political desire to regain control over the data of European citizens through legislative initiatives such as the RGPD, or through investment funds such as NGL_TRUST or DAPSI.

However, we lack technical means and it is now necessary to find practical solutions in addition to legal ones.

The issue about personal data

Our data is often shared with third parties without our knowledge and is often used for targeted advertising. But it can also be subject to abuses, like the Cambridge Analytica scandal.

Big Data offers unprecedented opportunities in terms of tracking individuals and modeling behaviours and thought patterns. This is why personal data is a personal, societal and political issue.



« The world of the Internet has turned our lives upside down as well as many economic models. This digital tsunami will accelerate with the introduction and advent of connected objects.

GAFAM and other web giants, on the basis of the information collected, know more and more about individuals and track them more and more. Tomorrow they will be able to offer administrative, financial or insurance services better than public services, banks or insurers.

Unfortunately, this advantage has a dark side, which is the large-scale spying on each person and can harm individual freedom.

Our goal is to raise awareness and make individuals aware of what is at stake with their personal data as well as providing them reliable tools to hide from Big Techs, to easily manage their personal data and to protect their belongings and their entourage. »

Patrick Simon, Founder & CEO Panga.

Cambridge Analytica / Facebook

Christopher Willie reveals the massive recovery of personal data for behavioral analysis. This research was used in particular for the presidential campaign of Donald Trump and the pro-Brexit campaign

Covid-19 & increase in cyber-crime

Many communities, hospitals and clinics as well as businesses were targeted by ransomware during the COVID-19 crisis, partly due to remote working conditions.

2018

2019

2020

2021

Zapya, the app used to identify Uyghurs

The ICIJ revealed through China Cables, the leak of confidential documents from the Chinese government, the use of the Zapya application from 2016 to monitor and identify the Uyghur population.

The Social Dilemma : The polarization of our societies

This documentary based on the testimony of former Big Tech employees describes the commodification of change in our worldview and behaviors.

Emerging risks

It is essential to make people understand that digital risks are no longer science fiction but are now very real, and that they can have dramatic consequences.

The number of abuses linked to our personal data is accelerating. We are heading towards a world of standardization, where our every move will be quantified and analyzed, and where our machines will tell us what to think, what to buy, what to do and who to vote for.

On its own, data is worthless.

However, with the introduction of Big Data, artificial intelligence and data matching mechanisms, it is possible to deduce important personal information, such as the metadata that characterizes our behavior and habits.

Risks for goods & for people...



**Targeted
propaganda**



**Privacy
tracking**



**Identity
theft**



**Information
theft**



**Reputation
loss**



**Online scam
Phishing**



**Cyber
bullying**



Profiling

Our actions are analysed and processed, and it is very easy to find out about our lifestyle, our tastes, our sexual orientation, or our political or religious opinions. Our identity can easily be hijacked or transformed by a malicious person, our news feeds are personalised to best influence our actions and opinions, whether we are shopping or voting.

Key statistics on personal data



In 2020, 1 on 2 people were victims of theft of personal data

70% is the percentage of IoTs that have security holes. There are on average 25 vulnerabilities per device

48%

of credit card fraud is due to phishing emails



71% of french people feel that the personal data they communicate on the Internet is poorly protected.



Data is an asset that needs to be protected, the risks are everywhere and increasingly present.

PyGuard aims to provide a tool to protect oneself, one's connected objects and to hide on the internet.

The PyGuard Project

Our project started upon an observation : Europe has missed out on the data market, to the benefit of GAFAM and BATX. The European Union showed a political will to regain control over the data of its citizens, through legislative initiatives such as the GDPR, or through investment funds such as NGI_TRUST or DAPSI. However, as of today, we still lack the technical means to limit their leakage abroad. This is why PyGuard pledged in the protection and sovereignty of our personal data.

PyGuard is a project driven by Panga, in partnership with MyDataBall and the Xlim laboratory. Funded by the MAIF Foundation and the European fund NGI_Trust, PyGuard is currently under development and not yet available on the market. Based in La Rochelle, the project was born out of the innovative idea of a fervent privacy advocate: Patrick SIMON, joined by a team equally convinced of the importance of protecting the personal data of citizens from GAFAM and BATX..

PyGuard's objective is to protect connected devices and the personal data of its users, while raising their awareness about digital risks.

Connected to your router, PyGuard filters all unnecessary connections and personal data on the internet. Strong advocates of data sovereignty, our solution is Privacy by Design in accordance to the GDPR : it was designed from the start to protect your personal data, which is why we store and process them locally, in the safety of your own home.

Our values

Proximity



For PyGuardians, proximity is an essential value. As a human-sized structure, we organize ourselves to ensure a constant availability and an expert listening to our customers and to all those who wish to protect their private life on the net, in order to offer relevant answers to the needs of each one.

Innovation



Specialized in personal data management, instead of relying on the individual security of each of your connected objects, we offer state-of-the-art technologies to protect users from digital threats.

Respect



Your personal data belongs to you and must remain private. For this reason, our team does everything possible to enable you to protect and ensure the sovereignty of your data.

Quality



Our Privacy by Design approach and our belief that respecting the privacy of citizens on the net is essential, has allowed us to be recognized by national and international players.

How it works ?



Figure 1 - Diagram of how the PyGuard solution works.

PyGuard's objective is to protect connected devices and the personal data of its users, while raising their awareness about digital risks. Pyguard is an hardware & software platform that's comes in between users and web servers.

PyGuard analyzes the traffic and the data contained in requests by placing itself as a trusted third-party between the devices and the internet : the web servers only communicate with a session anonymized by PyGuard, and users only communicate with the secure session generated by PyGuard.

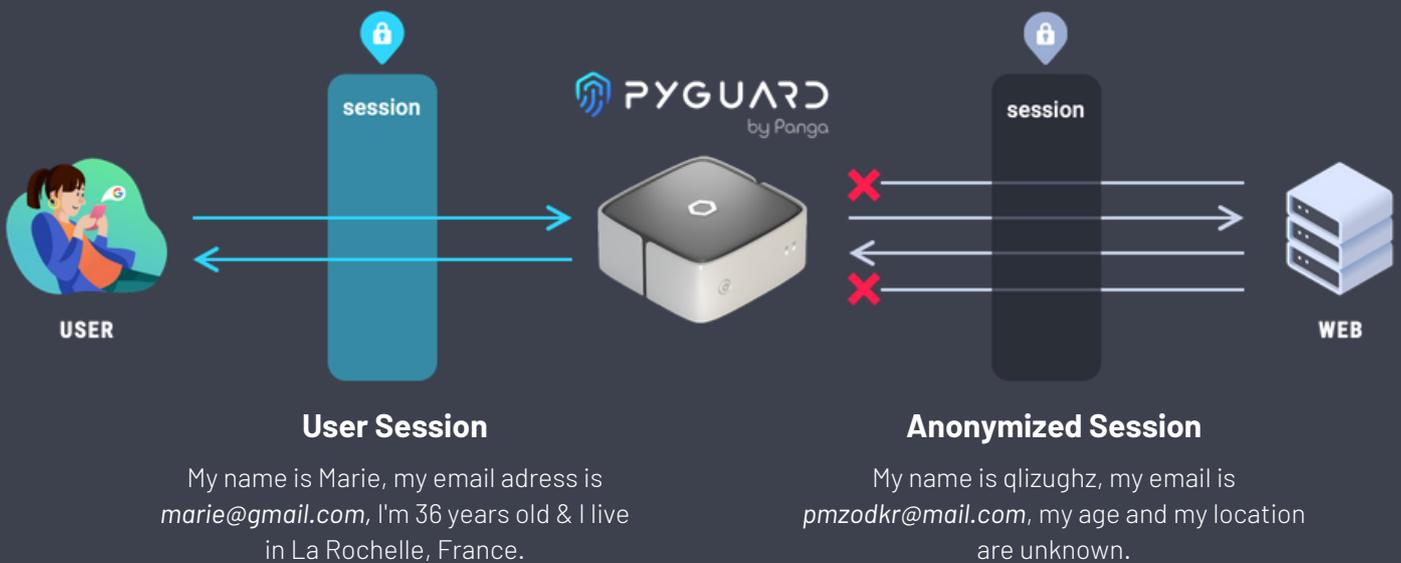


Figure 2 - Simplified diagram of the internal working.

As an all-in-one solution, PyGuard includes existing technologies to protect and anonymize yourself on the Internet, such as a VPN, an integrated firewall or an upstream antivirus that blocks threats before they even reach devices. PyGuard also relies on new cutting-edge technologies that have been specifically developed, such as a proxy capable of identifying, modifying or blocking personal data in requests; a neural network that categorizes connections so that PyGuard is intelligent and autonomous in its blocking choices; or complex algorithms to define the reliability of a connection.

All this complexity is hidden from users by the metaphor of digital personal avatars: profiles representing the way we are perceived on the Internet, based on our personal data. PyGuard adapts the level of user anonymity for each website.

Take a look at...



PyGuard is the incarnation of the POD in the "[SOLID Project](#)" by Tim Berners-Lee.

SOLID (Social Linked Data) is a project developing collaborative solutions for a decentralized web. The goal of Solid is to allow users to have full control over their personal data (or at least to have their own data), including access control and storage location.

Our ambition is to make PyGuard the butler of the home and the connected building.

The team



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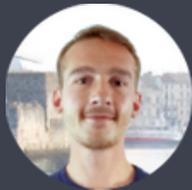
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