

Titouan Lazard

 <http://perso.eleves.ens-rennes.fr/people/titouan.lazard/>

Education

- 2017–2019 **Master and Magister of Science in Computer Science**, *ENS / Université de Rennes 1*, Rennes.
Research in Computer Science
- 2016–2017 **Bachelor of Science in computer Science**, *Université de Rennes 1*.
Computer Science
- 2014–2016 **DUT in IT, IUT**, Orléans.
Learning Software development and conception. The DUT is a two year cursus, focused on practice.

Experiences

- 2019-2020 **HP Labs Research Engineer**, *HP Labs*, Bristol, United Kingdom.
I work on the PCIe security DMA Attack and IOMMU protections.
- 2019 **Internship in the HP Security Lab**, *HP Labs*, Bristol, United Kingdom.
I worked on the security of PCIe components and their interaction with the main platform.
- 2018 **Internship for first year of Master**, *FAU*, Erlangen, Germany.
Developpement of TEEShift, a tool to selectively shift function of a compiled software into a Trusted Execution Environment to insure Code Confidentiality. It leads to a publication at SysTEX 2018 and a Best Paper Award: <https://doi.org/10.1145/3268935.3268938>
- 2017 **Internship for Bachelor's**, *Orange Cyberdéfense*, Rennes, 3 months.
I mainly did Pentest (Penetration Testing). I tested security of websites and IoT devices like smartlighth. I also did some Reverse Engineering on Android and iOS applications.
- 2016 **Internship for DUT**, *INSA Centre val-de-loire (College of engineering)*, Bourges, 2 months.
I worked on virtualization system for students workspaces. I also created and administrated an ELK server to manage logs from different devices in the school network.

Skills and Interest

- Low Level Security I am interested in low level software security such as Operating systems and Firmware. I practiced DMA attack over PCIe during my work at HP.
- Hardware Assisted security I like to explore the combination of hardware and software, more specifically, when software security relies on modern hardware security features like TPM or Trusted Execution Environment (Intel SGX, ARM TrustZone).
- Challenges I am contributor and administrator of the challenge platform Root-Me.