# Gorka Abad

Curriculum Vitae





## Education

2020-Today **Ph.D. candidate**, *Radboud University*, Nijmegen, The Netherlands,

In collaboration with Ikerlan research center in Spain.

research area Adversarial machine learning, mostly backdoor attacks.

supervisor Stjepan Picek

2019–2020 Master's degree in cybersecurity, Universidad Internacional de La Rioja (UNIR),

Spain, 8.6/10

thesis Enhancing IoT security through DLTs 9/10

supervisor Fidel Paniagua

2015–2019 Bachelor's degree in Software Engineering, Euskal Herriko Unibertsitatea (EHU),

Spain

thesis Online penetration testing laboratory 9/10

supervisor Juan Antonio Pereira

## Experience

2020–2020 Assistant researcher, Euskal Herriko Unibertsitatea (EHU), Spain

Working on the Group for Adaptive Teaching-Learning Environment (Ga-Lan Group), which centres on applying Artificial Intelligence techniques for developing learning systems and

tools with dynamic adaptation to the user.

2020–2020 **Cybersecurity Engineer**, Arinn Innovation, Spain

Internship working on cloud-based WAF management.

2018–2019 Software developer, IDE, Spain

Internship working on Java software development.

### **Publications**

2023 **Abad, G.**, Paguada, S., Ersoy, O., Picek, S., Ramírez-Durán, V. J., & Urbieta, A. (2023). **Sniper Backdoor: Single Client Targeted Backdoor Attack in Federated Learning**. To be presented in SaTML'23.

2022 **Abad, G.**, Ersoy, O., Picek, S., Ramírez-Durán, V. J., & Urbieta, A. (2022, November). **Poster: Backdoor Attacks on Spiking NNs and Neuromorphic Datasets.** In Proceedings of the 2022 ACM SIGSAC Conference on Computer and Communications Security (pp. 3315-3317).

# **Preprints**

2022 **Abad, G.**, Picek, S., & Urbieta, A. (2022). On the Security & Privacy in Federated Learning. arXiv preprint arXiv:2112.05423.

## Talks

- 2022 Backdoor Attacks on Spiking NNs and Neuromorphic Datasets.
  At Radboud University.
- 2022 **Poster: Backdoor Attacks on Spiking NNs and Neuromorphic Datasets.** At CCS'22.
- 2022 On the security and privacy in Federated Learning For VeriDevOps European project.
- 2022 Sniper Backdoor: Single Client Targeted Backdoor Attack in Federated Learning

At Radboud University.

2022 Sniper Backdoor: Single Client Targeted Backdoor Attack in Federated Learning

At Ikerlan research center.

#### Courses

- 2022 Summer School on real-world crypto and privacy, Šibenik, Croatia
- 2022 Summer School on Security and Privacy, KU Leuven, Leuven, Belgium

# Students Supervision

2022-Today Master's student supervision at Mondragón University & Ikerlan. Working on adversarial examples for face recognition systems.

## Languages

Basque Native

Spanish Native

English Advanced