

Pierre-Yves Ph. GUERDER

French nationality

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CYBERSECURITY CONSULTANT

Expert in technical audits (**penetration testing**) and **awareness**.

Strong experience in **full-stack development** (PHP, Python) and Linux.

LANGUAGES AND IT SKILLS

English: work language **French:** mother tongue **Spanish:** medium level **Chinese:** beginner

Cybersecurity

- **Pentest** (Burp Suite) and **code auditing** with and without **AI tools**
- **Pipeline tooling:** **SCA/SAST/DAST**, developer training
- **Bug bounty** since 2021
- **CEH Master** certification (2024)
- Cyber governance: writing Security Assurance Plans, implementing Security by Design

Involvement in IT projects

- Programming in **PHP/Symfony** (Doctrine, Twig, REST API, JWT) and **VueJs** daily since 2014
- Using **Python** (**Flask**, scripts, **bots**) and **SQLite** on my own projects since 2010
- Mastering Linux since 2003, management of **PHP-FPM**, **Apache**, **MySQL**, **OpenSSH** on production **VM/VPS**
- DevOps: creating **Docker** environments on workstations, **pipelines** and **Bash** deployment scripts

PROFESSIONAL EXPERIENCE

- Since 2022 **Cybersecurity consultant @ KLEE Group:** security audits (**pentesting**, **source code**, architecture) Raising **awareness** (general public, developers), in the company, at clients' and at **forum InCyber**
- 2014-2022 Fullstack web developer and CTO (about 10 developers) at **Spyrit systèmes d'information**. Development and maintenance of 50 applications using **Symfony 2/3/4/5/6**, **PHP 7/8** and **VueJS** **Agile/SCRUM** sprints, code review. Creating CI/CD **pipelines**. Advanced usage of **Git**.
- 2010-2014 Project (6 months), internship (3 months) and **PhD** (2 years at **IEMN** and 1 year at the U of AZ): development and simulations for elastodynamics on CPU/GPU clusters (Fortran, Python, CUDA)
- 2012-2014 **Teachings** in electronics (128 h of lab. for 2nd to 4th year students) at *École Centrale de Lille*
- Sum. 2011 Google Summer of Code: **MediaWiki parser** in **Python** implemented for the **Mozilla Foundation**
- Sum. 2010 **Google Summer of Code:** improving **MediaWiki** software (object-oriented PHP, MySQL, eclipse)
- 2009-2010 **Gap year in China** (at the *Shanghai Institute of Ceramics – Chinese Academy of Sciences*)
- Scientific research in nanotechnologies and deposition of active materials in thin layers
- Sum. 2009 IT internship at **EADS-DS:** development in **Java** of a multi-agent system
- Simulation of a military logistic chain for crisis management (confidential project)
- 2007-2009 **Project management** (2-year project, 300 h, 6-student team), in collaboration with LAGIS
- Design and development of a mobility-helper system using GPS, WiFi, PHP and C#
- Sum. 2008 **Research internship** in the *Electrical Engineering Department* of the **University of Texas**
- Two-month study at UT Austin about solar panels and Sun power measurements

EDUCATION

- 2018-2024 Certifications: **Symfony**, **CEH Master**. Self-learning on **Root-Me**, **TryHackMe**. Frequent **Meetups**.
- 2011-2014 PhD at *École Centrale de Lille*, **IEMN** and **The University of Arizona** at Tucson
- 2007-2011 *École Centrale de Lille:* Graduate School in Engineering; graduation in 2011 (**Master's degree**) Specialization in "Waves, micro-nano-technologies, telecom" and MSc in scientific research
- 2005-2007 **Classe préparatoire aux Grandes Écoles – CPGE – Lycée Fénélon** (Paris)
- Intensive undergraduate studies in maths and physics for admission to École Centrale de Lille
- June 2005 **Baccalauréat "S":** Scientific High School diploma, with highest honours (equivalent to A-levels)

HOBBIES AND COMMUNITY INVOLVEMENT

Own computer projects, bug bounty, photography, genealogy, theology, bioethics and scuba diving (2* diver)
Writing reports about my trips (Europe, Asia, USA)

References available upon request

CYBERSECURITY: RESEARCH AND PUBLIC TALKS

Main CVE discovered

- **CVE-2025-30091** (CVSS4: **9.4**) : unauthenticated remote code execution on MoxieManager
- **CVE-2025-59952** (CVSS4: **8.7**) : environment variable leaked on MinIO-Java

Awareness raising sessions and talks

- *Cyber show* (90 min) for the general public: demonstration of phishing, Trojan, hardware hacking...
- *Live hacking session* (30 min) for developers: supply-chain attack, pwning a production machine
- Teaching cybersecurity to technical and non-technical teams (15 sessions, 2.5 hours, 100 participants)
- Teaching secure development: DevSec, OWASP Top10, tooling (30 sessions, 2.5 hours, 500 participants)
- Live Hacking Sessions at forum InCyber (Lille, France) in 2023, 2024, 2025
- Frequent talks at Meetup OWASP, chapter France (Paris, 2022-2026)

RESEARCH

PhD

"Theoretical and numerical study of tunable magnetoelastic and nonlinear phononic crystals"

Thesis directors:

- Olivier Bou Matar, LIA LEMAC, IEMN, UMR CNRS 8520, PRES Lille Nord de France, ECLille, Villeneuve d'Ascq
- Jérôme Vasseur, IEMN, UMR CNRS 8520, IUFM Nord-Pas de Calais, Université d'Artois, Villeneuve d'Ascq
- Pierre Deymier, *Materials Science and Engineering department, University of Arizona, Tucson, USA*

Publications

- O. Bou Matar, **P.-Y. Guerder**, Y. Li, B. Vandewoestyne, K. Van Den Abeele, *A nodal discontinuous Galerkin finite element method for nonlinear elastic wave propagation*, J. Acoust. Soc. Am. 131 (5), 3650-3663 (2012)
- **P.-Y. Guerder**, A. C. Deymier-Black, N. Z. Swintek, J. O. Vasseur, O. Bou-Matar, K Muralidharan, P. A. Deymier, *Multi-phonon scattering processes in one-dimensional anharmonic biological superlattices: understanding the dissipation of mechanical waves in mineralized tissues*, Journal of the Mechanical Behavior of Biomedical Materials. 37, 24-32 (2014)
- **P.-Y. Guerder**, S. Giordano, O. Bou-Matar, J. O. Vasseur, *Tuning the elastic nonlinearities in composite nanomaterials*, J. Phys.: Condens. Matter 27 (2015) 145304

Congresses

- O. Bou Matar, **P.-Y. Guerder**, Y. Li, *Une méthode Galerkin discontinue nodale pour la propagation non linéaire d'ondes élastiques fonctionnant sur carte graphique (GPU)*, XIIèmes Journées d'Acoustique Physique Sous-Marine et Ultrasonore, JAPSUS 2011, Lille, 8-10 juin 2011.
- O. Bou Matar, **P.-Y. Guerder**, *Nonlinear elastodynamic simulations using a Discontinuous Galerkin method on graphics processors*, Acoustics 2012, Nantes, 23-27 avril 2012.
- O. Bou Matar, **P.-Y. Guerder**, H. Zhou, V. Aleshin, *Nonlinear elastodynamic simulations using the discontinuous Galerkin finite element method on graphics processors*, 18th International Conference on Nonlinear Elasticity in Materials, ICNEM XVIII, Ascona (Suisse), 2013

Teachings

- Lab. work (128 h in Fall 2012 and Spring 2014) for 2nd/3rd/4th year students at *École Centrale de Lille/ITEEM*
- Project management (Spring 2012) with INRIA for Master 1 students