Mohamad Mansouri, Ph.D.

http://m-mansouri.com

- 🖓 www.github.com/MohamadMansouri
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- **Toulouse**, France

Summary



- Cryptographer expert in designing and implementing crypto solutions based on best security standards.
- Security researcher experienced in vulnerability analysis for Web 3 and decentralized applications.
- Exhibits excellent problem-solving, project management, writing, and communication skills.

Employment History

Web 3 Security Researcher. (2024 – present) Dedaub, Malta.

- Performing security audits for decentralized protocols.
- Designing novel security solutions for blockchain technology.
- **Senior Cryptography Software Engineer. (2023 2024)** NXP Semiconductors, France.
 - Developing and maintaining cryptography libraries for NXP products.
 - Hardening of NXP crypto libraries against fault attacks and side channel attacks.
- Security Research Engineer. (2020 2023) Thales SIX GTS, France.
 - Researching and developing new security protocols for privacy protection.
 - Integrating research results into Thales products.
- **Final Year Internship. (2019)** Stevens Institution of Technology, USA.
 - Researching automatic patching and remediation techniques
- Summer Internship. (2018) Digital Security Department, EURECOM, France.
 - Researching privacy-preserving techniques for machine learning
- Penetration Tester. (2017) NetRom Consultants, Lebanon.
 Performing black-box penetration testing for web applications and internal networks.

Education

- **Ph.D., University of Sorbonne. (2020 2023)** Cryptography and Security.
- Engineering Diploma, Telecom ParisTech (EURECOM). (2017 2019) Digital Security.
- **Engineering Diploma, Lebanese University. (2013 2017)** Telecommunication and Electronics.

Skills

Cryptography 📕 NIST and ISO/IEC Standards, AES, ECC, RSA, PQC, Zero-Knowledge Proofs.

Programming 📕 En

Embedded C, C++, Python, Solidity, Java, Go, Assembly (Arm, RISC V).
 Smart Contracts, Decentralized Apps, Web Apps, Android Apps

Code Auditing Reverse Engineering

- 📕 IDA Pro, Radare2, Intel Pin, Frida.
- Team Tools 📕 Ji Languages 📕 E
 - Jira, Bamboo, BitBucket, Git, Svn, Jenkins, Collabnet.
 - English (Professional), French (Intermediate), Arabic (Native).
 - Soft Skills 📃 Agile, Communication, Presentation, Critical Thinking, Project Management.

Research Publications



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Mansouri, **M.** (2023). *Performance and Verifiability of IoT Security Protocols* (Theses, Thèses de Sorbonne Université). Retrieved from *Integration for the second sec*

2 **Mansouri**, **M.**, Önen, M., Ben Jaballah, W., & Conti, M. (2023). Sok: Secure aggregation based on cryptographic schemes for federated learning. In IACR (Ed.), *Pets 2023, 23rd privacy enhancing technologies symposium, 10-15 july 2023, lausanne, switzerland (hybrid conference).* IACR, Lausanne.

3 Mansouri, **M.**, Xu, J., & Portokalidis, G. (2023). Eliminating vulnerabilities by disabling unwanted functionality in binary programs. In *Proceedings of the 2023 acm asia conference on computer and communications security* (pp. 259–273). *I doi:*10.1145/3579856.3595796

Mansouri, M., Önen, M., & Ben Jaballah, W. (2022). Learning from failures: Secure and fault-tolerant aggregation for federated learning. In *Proceedings of the 38th annual computer security applications conference* (pp. 146–158). *O* doi:10.1145/3564625.3568135

Marcelli, A., Graziano, M., Ugarte-Pedrero, X., Fratantonio, Y., Mansouri, M., & Balzarotti, D. (2022). How machine learning is solving the binary function similarity problem. In Usenix (Ed.), Usenix 2022, 31st usenix security symposium, 10-12 august 2022, boston, ma, usa, Boston. Retrieved from https://www.usenix.org/conference/usenixsecurity22/presentation/marcelli

Mansouri, **M.**, Ben Jaballah, W., Önen, M., Rabbani, M. M., & Conti, M. (2021). Fadia: Fairness-driven collaborative remote attestation. In *Proceedings of the 14th acm conference on security and privacy in wireless and mobile networks* (pp. 60–71). *O* doi:10.1145/3448300.3468284

Mansouri, M., Bozdemir, B., Önen, M., & Ermis, O. (2020). Pac: Privacy-preserving arrhythmia classification with neural networks. In A. Benzekri, M. Barbeau, G. Gong, R. Laborde, & J. Garcia-Alfaro (Eds.), *Foundations and practice of security* (pp. 3–19). *O* doi:10.1007/978-3-030-45371-8_1