# SOPHIE DRAMÉ MAIGNÉ

Innovation researcher



## **EXPERIENCE**

Blockchain and Self-Sovereign Identity (SSI) Innovation Researcher

#### **Space Elephant**

♥ Nantes, FRANCE (remote position)

- Monitoring and vulgarization of SSI-related subjects
- High-level solution design
- Redaction of technical documentation (patent, annual research summary, whitepaper, etc)

# IoT Innovation Researcher (Phd Student) Gemalto/Thalès DIS

Meudon, FRANCE

- Research on blockchain ecosystems and IoT access control
- Communication in international conferences
- Developments around access control libraries and blockchain smart contracts

## Research engineer

IRT System X

🛗 Jan. – July 2016

Palaiseau, FRANCE

Development of a demo platform for IoT security (CHESS platform)

#### Master Internship

Gemalto

## April - Sept. 2015

Meudon, FRANCE

Design and development of an authorization delegation framework for IoT communications.

#### **EDUCATION**

#### Ph.D. in Computer Science

Université Paris-Saclay (Télécom SudParis)

# July 2016 - Nov. 2019

Blockchain and access control: Towards a more secure Internet of Things

#### M.Sc. in Cryptography with highest honour

Université Paris Diderot Paris 7

## Sept. 2013 - Sept. 2015

Education Abroad First year of Masters

**Cornell University** 

🗎 Sept. 2013 - May 2014

**♀** Ithaca, NY, USA

# B.Sc. in Maths and Computer Science with highest honour Université Paris Diderot Paris 7

M Sept. 2010 - June 2013

## MY LIFE PHILOSOPHY

"Have patience. All things are difficult before they become easy."

- Saadi

## **ONLINE PROFILES**

% www.sophiedm.fr/en
in /in/sophie-dramé-maigné-a2a6a8101

## CERTIFICATIONS

ISO/IEC 27005 Provisional Risk Manager

## **STRENGTHS**

Analytical Skills | Communication skills | Redaction skills FR & EN

Experienced in remote-working

Protocol design | Security analysis

Risk management | Blockchain

Self Sovereign Identities (SSI)

Access control

## **LANGUAGES**

French English German



## **SKILLS**

Java Node.js MySQL MongoDB

MQTT Mosquitto OAuth 2.0

UMA Solidity EBIOS method

## **HOBBIES**

Bridge Dungeons & Dragons (D&D)

(Cooperative) Board games Sewing

## **PUBLICATIONS**

#### **Book**

 Dramé-Maigné, Sophie (2022). "Authentification décentralisée: la Blockchain en tant que DPKI". in: Blockchain & Cryptos 60 experts vous expliquent tout. Ed. by Jean-Luc Lasquellec. Wallcrypt. Chap. 5, pp. 415–419.

#### Journal

• Dramé-Maigné, Sophie et al. (2021). "Centralized, Distributed, and Everything in between: Reviewing Access Control Solutions for the IoT". in: ACM Computing Surveys (CSUR) 54.7, pp. 1–34.

### Conference Proceedings

- Dramé-Maigné, Sophie, Maryline Laurent, and Laurent Castillo (2019). "Distributed access control solution for the IoT based on multi-endorsed attributes and smart contracts". In: 2019 15th International Wireless Communications & Mobile Computing Conference (IWCMC). IEEE, pp. 1582–1587.
- Dramé-Maigné, Sophie et al. (2018). "Augmented chain of ownership: Configuring IoT devices with the help of the blockchain". In: *International Conference on Security and Privacy in Communication Systems*. Springer, pp. 53–68.

#### Doctoral Thesis

 Dramé-Maigné, Sophie (2019). "Blockchain and access control: towards a more secure Internet of Things". PhD thesis. Université Paris-Saclay (ComUE).

## **Technical Specifications**

- Dramé-Maigné, Sophie (2021). *Unikname DID Specification*. Tech. rep. Space Elephant. URL:
  - https://github.com/unik-name/did-method-spec/blob/main/did-unik/UNIK-DID-Specification.md.
- Dramé-Maigné, Sophie and Juliette Mégret (2021). Whitepaper Unikname - The Multipurpose Self-Sovereign Identity Solution without KYC. tech. rep. Space Elephant. URL:
  - https://github.com/unik-name/unikname-papers/blob/master/unikname\_whitepaper.pdf.
- Dramé-Maigné, Sophie (2020). uns.network DID Method Specification.
   Tech. rep. Space Elephant. URL:
  - https://github.com/unik-name/did-method-spec/blob/main/did-uns/UNS-DID-Specification.md.

# TRAINING & PROFESSIONAL DEVELOPMENT

## Cybersecurity risk management [20 days]

- Network architecture
- Compliance with privacy regulations (GDPR)
- Security of a remote work station
- Initiation to the EBIOS Risk Management method

#### Entrepreneurship [60 hours]

Mov. 2018 & Jan. 2019

- From an idea to an entrepreneurial project: Proof of value
- Defining the MVP (Minimum Viable Product)
- Pitch in front of Business Developers

#### Management [21 hours]

# Jun - July 2018

- The tools of project management: Gantt diagrams, logic networks, etc
- Projects' life cycle
- Agile method

#### Vulgarization [37 hours]

🛗 Jan. 2017, Apr. 2018 & Jun. 2018

- Short impactful summary of my PhD work (Ma thèse en 180s [FR])
- Scientific writing for non experts
- Scientific debate moderation

Paris, October 13, 2022