Sergio A. Figueroa **Information Security Consultant**



Languages



Spanish

Native



English

Fluent



German

Work proficiency

Skills

Underlined=core expertise



IT-Security

Threat modeling, cryptography, application security, compliance (e.g. ISO 27001, ISO/SAE 21434), online voting



Programming languages

Python, Java, Rust, C



Knowledge sharing

Technical writing, typesetting, training (production, hosting), template maintenance



Misc

UX design, definition and security of business processes, iconography

Online presence



LinkedIn

Profile [7]



StackExchange

Cryptography 🖸

Work experience (11 years)

Senior Security Consultant

Black Duck / Synopsys GmbH (Germany)

Oct/2021-present (3 years 8 months)

The Synopsys Software Integrity Group became a standalone company, Black Duck, in October 2024.

Information security consulting, mainly around threat modeling. Development of internal capabilities and external perception. Examples:

- Product Owner role for a threat modeling automation tool.
- Development of the threat modeling methodology.
- Creation of training material (threat modeling, secure Java development, among others).
- Lead customer trainings (in person and virtual).
- Maintain templates for project deliverables (e.g. reports, diagrams).
- SME in Post-Quantum Cryptography (PQC).
- · Represent the company in public with whitepapers, participation in conferences and responding to journalistic inquiries.

Security Consultant

ESCRYPT GmbH (Germany)

Feb/2017-Sep/2021 (4 years 7 months)

Consult on security projects for embedded device OEMs, mainly in the automotive and IoT domains. Risk analyses, security concepts, development and maintenance of LaTeX templates.

Information Security Consultant

Cybertech de Colombia

Dec/2011-Aug/2014 (2 years 8 months)

Security consulting with emphasis on cryptography.

- Development, installation and support of cryptographic software.
- Prepare and hold trainings (e.g. cryptography, secure coding).
- Assist customers with bespoke security needs.

(Internship) Developer

Indra Colombia

☐ Jul/2010–Jan/2011 (6 months)

Develop and support software for a telco.

Publications

2025 Threat Modeling: **Charting Your Security Journey**

Black Duck

Webinar (registration needed)

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2024 About ransomware

TechRadar

Article 🛂

2023 Threat Modeling

Black Duck (coauthor) Whitepaper (registration needed) 🖸

2013 About biometrics

ENTER.CO (Colombian magazine)

Article (Spanish) 🗹

2011 About passwords

ENTER.CO

Article (Spanish)

2011 About web tools

ENTER.CO

Article (Spanish)

Public mentions

2025 About prime numbers in cryptography

Teri Robinson, Security Boulevard

Article 🔼

2010 Innovation award

Universidad de los Andes Interview (Spanish) [2]

2007 Interview

Mauricio Jaramillo Marín. El Tiempo (Colombian newspaper) Link (Spanish) [2]

Education

NordSecMob - Master's Programme in Security Double degree master and Mobile Computing

Aalto University (Finland) / University of Tartu (Estonia)

Sep 2014-Jun 2016

Double degree program between Aalto University (focus: modern networking) and University of Tartu (focus: cryptography).

Thesis: Key management in online voting settings Archive

Information Security Specialization



multiple Universidad de los Andes (Colombia)

Aug 2012 – Aug 2013

Specialization: in Colombia, 1-year graduate level degree.

Holistic information security education program (topics include: cryptography; network, host, and application security, security standards).

Comp. Systems Engineering Engineer (Bachelor)



multiple Universidad de los Andes (Colombia)

Bachelor program. Focus on software architecture and implementation, computer and network architectures, and business process management.