

# Sergio A. Figueroa

## Information Security Consultant

📍 Augsburg, Germany    ✉️ [sergioaffs@gmail.com](mailto:sergioaffs@gmail.com)

### Main languages



#### Spanish

Native



#### English

Fluent



#### German

Working proficiency

### Skills



#### Security

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



#### Programming

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](#)



#### StackExchange

[Cryptography StackEx.](#)   
[IT Security StackExchange](#)

### Working Experience (11 years)

#### Senior Security Consultant

🏢 Black Duck / Synopsys GmbH (Germany)

📅 Feb/2023–Present (2 years)

(The Synopsys Software Integrity Group became a standalone company, Black Duck, in October 2024.) Conduct and enable security consulting activities, mainly concerning threat modeling, including tool development (as Product Owner), training material, templates and methodological refinements. SME in Post-Quantum Cryptography (PQC). Represent the company's public perception with whitepapers, participation in conferences and responding to journalistic inquiries.

#### Security Consultant

🏢 Synopsys GmbH (Germany)

📅 Oct/2021–Feb/2023 (1 years 4 months)

Conduct and enable security consulting activities, mainly concerning threat modeling. Template development.

#### Security Consultant

🏢 ESCRYPT GmbH (Germany)

📅 Feb/2017–Sep/2021 (4 years 7 months)

Consult in security activities 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)

Develop, install and support cryptographic products. Design and hold trainings (e.g. cryptography, secure coding). Assist customers with bespoke security needs.

#### (Intern) Developer

🏢 Indra Colombia

📅 Jul/2010–Jan/2011 (6 months)

Internship. Develop and support software for a telco.

## Publications

### 2023 Threat Modeling

Black Duck (coauthor)

[Whitepaper](#) 

### 2013 On biometrics

ENTER.CO (Colombian tech magazine)

[Article \(in Spanish\)](#) 

### 2011 On passwords

ENTER.CO

[Article \(in Spanish\)](#) 

### 2011 On web tools


ENTER.CO

[Article \(in Spanish\)](#) 

## Acknowledgements

### 2010 Innovation award

Universidad de los Andes

[Interview \(in Spanish\)](#) 


### 2007 Interview


El Tiempo (Colombian newspaper)


[Link \(in Spanish\)](#) 

## Education


### **NordSecMob — Master's Programme in Security and Mobile Computing**

 Double degree masters


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


 Sep 2014–Jun 2016


Double degree program. Aalto University focused on high-scale networking technologies. University of Tartu focused on cryptography.

**Thesis:** Key management in online voting settings [Archive](#) 

### **Information Security Specialization**


 Specialist


 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).

### **Computer Systems Engineering**

 Engineer (Bachelor)

 Universidad de los Andes (Colombia)

 Aug 2007 – Dec 2011

Bachelor program. Focus on software architecture and implementation, computer architecture, networking and business process management, etc.