

**WORK
EXPERIENCE**

Information Security Consultant, CYBERTECH DE COLOMBIA

Bogotá, Colombia 2011-Dec to 2014-Aug

Main responsibilities:

- Provide support and implement new features for cryptographic software.
- Lead information security consulting projects. Specifically about cryptographic solutions and risk assesment.
- I+D of new technologies for information security management.

Accomplished goals:

- The analysis of security vulnerabilities in critical environments, including government, military and banking.
- Development of new learning tools to improve the effectiveness of information security education (in academic and business scenarios).
- Construction of cryptographic systems designed to offer, at the same time, high levels of security and usability.
- “Education-based support”: support provided in such a way it ensures that clients understand the relevance of each step of the information security chain.

Developer in the Movistar Provisioning Group, INDRA COLOMBIA

Bogotá, Colombia 2010-Jul to 2011-Jan

Main responsibilities:

- The development of applications to support provisioning at Movistar Colombia.
- To provide maintenance and support for legacy systems at Movistar Colombia.

Accomplished goals:

- Development and support for the company’s core system.
- Implementation of modules for an end-user system within Movistar.
- Design and implementation of a traffic simulation system under different parameters.

Unpaid Associate, DESIGNER LTDA.

Bogotá, Colombia 2009-Jun to 2009-Aug

Main Responsibilities:

- Consulting regarding the implementation of new technologies.
- Providing assistance in the implementation of several components of the payroll software offered by the company.

Accomplished goals:

- The implementation of new end-user technologies to improve employee performance.
- The successful deployment of the system at several companies in different industries.

EDUCATION**NordSecMob - Master's Programme in Security and Mobile Computing, UNIVERSITY OF TARTU**

Tartu, Estonia 2015-

- Thesis on **key management for Internet voting scenarios**.
- Focus on cryptography: covering principles and advanced protocols, such as homomorphic encryption, zero knowledge proofs, commitments and quantum cryptography.

NordSecMob - Master's Programme in Security and Mobile Computing, AALTO UNIVERSITY

Espoo, Finland 2014-

- Focus on mobile technologies and large scale networking: Next Generation and Content Distribution Networks, concurrent and cloud computing.

Specialization in Information Security, UNIVERSIDAD DE LOS ANDES

Bogotá, Colombia 2012-2013

- Comprehensive information security education: from policy and definition of security requirements to security in development and infrastructure.
- Led lectures on BPMN, cryptography and co-authored a workshop about security in industrial control systems.

Computer Systems Engineering, UNIVERSIDAD DE LOS ANDES

Bogotá, Colombia 2007-2011

- (2011) Semifinalist in the international FutureMinds competition, organized by the Spanish corporation Indra.
<http://www.indracompany.com/tu-carrera-en-indra/future-minds>
- (2010) Winner of the *Innovation with Information and Communication Technology* competition at Universidad de los Andes, with the subsequent publication of the award-winning project in the digital edition of Dinero magazine.
Short link: <http://goo.gl/T1PTfF>

SKILLS**Information security**

- Design and implementation of cryptographic solutions
- Risk assessment
- Vulnerability analysis and penetration testing
- Business process vulnerability identification
- Network security

Software

- Programming languages (working level): Java, Python.
- Programming languages (basic knowledge): C, C#, PL/SQL, OS scripting (Windows, Linux), Android.
- Software architecture evaluation (ATAM methodology).

Others

- Experience leading software and consulting projects in charge of a small team.
- Principles of estimation for software projects.
- Experience communicating technical information in written and verbal forms.

LANGUAGES

SPANISH Native speaker
 ENGLISH Fluent - *TOEFL iBT Score: 103/120*
 FRENCH Working knowledge
 GERMAN Basic knowledge
 ITALIAN Basic knowledge

ACCOMPLISHMENTS

The links in this section belong to third parties and may not be available all the time. All of them are in spanish.

2010-2011, 2013 Occasional contributor for ENTER.CO magazine.

<http://goo.gl/bZjxfP>

<http://goo.gl/4Q3Dnk>

<http://goo.gl/Q07Lk3>

2007 Appearance in an edition of newspaper EL TIEMPO discussing experiences and comments regarding the Web 2.0. Monday March 19 2007.

<http://www.eltiempo.com/archivo/documento/MAM-2420476>

OTHER EDUCATION**Unpredictable? Randomness, Chance and Free Will**

Introduction to randomization in computer science

NATIONAL UNIVERSITY OF SINGAPORE - in association with Coursera

Online course 2014

Usable Security

How to improve security decisions made by users

UNIVERSITY OF MARYLAND - in association with Coursera

Online course 2014

Malicious Software and its Underground Economy

Introduction to malware analysis

UNIVERSITY OF WASHINGTON - in association with Coursera

Online course 2013

Securing Digital Democracy

Course about security on physical, mechanical and electronic voting systems

UNIVERSITY OF MICHIGAN - in association with Coursera

Online course 2012

Natural Language Processing

Course about Natural Language Processing

STANFORD UNIVERSITY - in association with Coursera

Online course 2012

Cryptography I

Introduction to cryptography

STANFORD UNIVERSITY - in association with Coursera

Online course 2012

Military Intelligence and Cryptography

Graduate-level course about theory and implementation of cryptographic mechanisms

UNIVERSIDAD DE LOS ANDES

Bogotá, Colombia 2011