

## Cyber Security Architect / Ninja Developer / SecOps

### Introduction

*Former developer and security enthusiast, I like to deal with projects combining these two skill sets. My experience in development, as well as my curiosity for new technologies, allow me to have a look forward to the future. I put real importance in sharing knowledge and skills within my job environment. Eager for knowledge, I'm always looking for challenges and exploitation of new knowledges.*

*Career objectives : Cyber Security Architect; Instructor; Technical Expert; DevSecOps; Slasher;  
Domains : Cyber Security; Big Data; IoT; Blockchain;*

### Work Experience

#### **Continental Digital Services [Automotive - R&D]**

**Toulouse - France**

*Cyber Security Architect / Ninja Developer / SecOps / PO*

*June 2017 -*

- › Product Owner for internal security products.
- › Technical leader / Golang guru.
- › Cyber risk monitoring services definition (AWS).
- › Production platform definition (Data, Services, Products, Operations).
- › Security By Design strategy definition.
- › Secured communication gateway Connected Cars <-> Cloud. (HTTP, MQTT, CoAP)
- › Identification, authorization and accounting platform. (AWS, Go, OIDC / SAML2)
- › Privacy proof authentication protocol. (Crypto, ZKP)
- › Private blockchain integration. (Ethereum, Data Sharing, Licensing)
- › Privacy engineering. (Crypto, Go, Java, Scala)
- › Hardening guides writeups. (AWS, Docker / K8S)
- › Architecture audits and consulting. (Threat Modeling)
- › Security code review. (Java / J2EE, NodeJS, Python, Go, Crypto)
- › Formation / Awareness. (Go, Crypto, Blockchain)

#### **Sogeti ESEC [Security - ESN]**

**Toulouse - France**

*Cyber Security Expert / Data Architect / Full Stack Developer / DevOps*

*October 2013 - June 2017*

- › CERT / SOC tooling.
- › Incident management bridge Jira / QRadar (Go, Javascript, RethinkDB)
- › Automated malware analysis platform for IoC extraction. (Go, RethinkDB, RabbitMQ, Docker, Cuckoo, VirusTotal, Yara, AngularJS 2)
- › Threat intelligence platform (Go, RabbitMQ, Elasticsearch, Neo4j, AngularJS)
- › Vulnerability monitoring and followup platform. (Go, RabbitMQ, MongoDB, AngularJS)
- › Embedded automated virus detection box for USB devices. (Go, AngularJS, Qt, ZMQ, Docker)
- › Microservices: email (composing, sending, signatures), identification / authorization, tokens, licences (Go, gRPC, Consul, Vault, Docker, Rancher)
- › Security code review. (Java / J2EE)
- › Trainee mentoring.

#### **Infotel [Mainframe - Editor / R&D]**

**Toulouse - France**

*Engineer R&D / Scrum Master*

*January 2010 - October 2013*

- › Digital Safe platform. (RabbitMQ, Protobuf, Scala/AKKA, Java, Spring, Elasticsearch, AngularJS)
- › Identification, authorization and accounting platform. (Java, Spring, JWT, PKI, PKCS#11, HOTP)
- › Documentation toolchain. (Git, Jenkins, Maven, Docbook5, XSLT, FOP)
- › Code review. (Java, J2EE)
- › Applicative maintenance. (ClearCase, Java, Struts2, Eclipse RCP, Z/OS)
- › Trainee mentoring.

- › EBIOS method risk analysis tool (SOA, J2EE, .Net)
- › Metamodeling for risk modeling applied on software designs (UML)
- › Code review (Java/J2EE, C/C++, PHP)
- › Reverse engineering (Crackme)
- › SoC Analyst
- › Instructor for Virtualisation / Firewall & Access controls workshops

## Education

<b>IUP ISI</b>	<b>Toulouse - France</b>
<i>Master's degree in Computer Science - 2nd year</i>	2008
› UML Metamodel; Realtime programming (ADA, C, SCADE); J2EE; Law;	
<i>Master's degree in Computer Science - 1st year</i>	2007
› UML Modeling; Distributed programming (Java / J2EE, C); Databases; Mathematics; Management / Economy;	
<i>License's degree in Computer Science</i>	2006
› UML Modeling; Languages (Java / C++ / C / ASM); Databases; Mathematics; Management / Economy;	

<b>IUT Informatique</b>	<b>Nice - France</b>
<i>License's degree in Network and System administration</i>	2005
› Network administration; System administration (Unix, Windows); Database administration (Oracle); Mathematics; Management / Economy; Law;	
<i>Associate's degree in Computer Science</i>	2004
› Database; Languages (Java / C++ / C); Network; Mathematics; Management / Law;	

<b>Lycée Albert Camus</b>	<b>Fréjus - France</b>
<i>High School's degree in Science and Engineering, option Mathematics</i>	2002
› Mathematics; Mecanic; Electronic; Computer Science;	

## Languages

- › Français - Langue maternelle
- › Anglais - Lu, écrit et parlé

## Skills

Evaluation scale : [5] "Expertise", [4] "I Do", [3] "I know", [2] "I'm learning" and [1] "Only if really necessarily".

### Non-Technicals

Creative Thinking <sup>5</sup>; Technology watch <sup>5</sup>; Slasher <sup>5</sup>; Project Management / Scrum Master <sup>4</sup>; Meeting lead <sup>4</sup>; Pedagogy / Vulgarisation <sup>4</sup>; Scientific publication writeup <sup>3</sup>; Public talks <sup>3</sup>;

### Security

Defensive Programming <sup>5</sup>; Security Threat Countermeasures <sup>5</sup>; OWASP Top 10 <sup>5</sup>; SANS Top 25 <sup>5</sup>; Code audit <sup>4</sup>; Cryptography / Cipher <sup>4</sup>; Container / Software Hardening <sup>4</sup>; Threat Modeling (DFD, AT) <sup>4</sup>; Threat Intelligence <sup>4</sup>; Cuckoo Sandbox <sup>4</sup>; Risk Analysis (EBIOS) <sup>3</sup>; GDPR <sup>3</sup>; Suricata <sup>3</sup>; Bro IDS <sup>3</sup>; Honeyd <sup>3</sup>; Cowerie / Kippo <sup>3</sup>; Sinkhole <sup>3</sup>; QRadar SIEM <sup>3</sup>; Splunk <sup>3</sup>; ElasticSearch / LogStash / Kibana <sup>3</sup>; Reverse Engineering <sup>2</sup>; Penetration Testing <sup>2</sup>;

### Languages

Go <sup>5</sup>; JavaScript <sup>5</sup>; Java <sup>5</sup>; C/C++ <sup>4</sup>; Rust <sup>4</sup>; Ruby <sup>4</sup>; Python <sup>4</sup>; Scala <sup>3</sup>; ASM (x86, ARM7) <sup>3</sup>; PHP <sup>3</sup>; Elixir <sup>2</sup>; Erlang <sup>2</sup>;

### Data Engineering

Semantic Modeling <sup>5</sup>; Data Preparation <sup>5</sup>; Data Wrangling <sup>5</sup>; Data Scraping <sup>5</sup>; Protégé <sup>4</sup>; Anonymisation <sup>4</sup>; ElasticSearch / LogStash / Kibana <sup>4</sup>; Digital signal processing <sup>3</sup>; Anomaly detection <sup>3</sup>; Statistics <sup>3</sup>; Python / Jupyter / Pandas <sup>3</sup>; SciKit Learn <sup>3</sup>; Machine learning (SVM, PNN, RF, GBM) <sup>3</sup>; H2o <sup>3</sup>;

### FullStack Affinities

Backend Development <sup>5</sup>; DevOps <sup>5</sup>; Frontend Development <sup>4</sup>; UI/UX Designer <sup>1</sup>;

### Backend Framework

Clean Architecture <sup>5</sup>; Microservices Patterns <sup>5</sup>; Resilience Patterns <sup>5</sup>; gRPC / Protobuf <sup>5</sup>; REST / GraphQL <sup>5</sup>; NodeJS <sup>4</sup>; Express <sup>4</sup>; Ruby on Rails <sup>3</sup>;

### Cloud

RabbitMQ <sup>5</sup>; NATS <sup>5</sup>; NSQ <sup>5</sup>; ZMQ <sup>5</sup>; WebSocket <sup>5</sup>; Serverless <sup>5</sup>; MQTT / eMQTTd <sup>4</sup>; Apache Kafka <sup>4</sup>; Amazon IAM / Cognito <sup>4</sup>; Amazon EC2 <sup>4</sup>; Amazon SNS <sup>3</sup>; Amazon IoT <sup>3</sup>; Amazon API Gateway / Lambda <sup>3</sup>; CoAP / DTLS <sup>3</sup>;

### DevOps

Docker <sup>5</sup>; Rancher <sup>5</sup>; Prometheus <sup>5</sup>; Consul <sup>5</sup>; Vault <sup>5</sup>; Grafana <sup>4</sup>; GitlabCI <sup>4</sup>; Kubernetes <sup>4</sup>; Helm <sup>4</sup>; Istio / Envoy <sup>4</sup>; Sentry <sup>4</sup>; Jenkins <sup>3</sup>; Terraform <sup>3</sup>; Ansible <sup>2</sup>;

### Frontend / UX

VueJS / Vuex <sup>4</sup>; Apollo <sup>4</sup>; HTML5 <sup>3</sup>; CSS3 / SASS / LESS <sup>3</sup>; WebAssembly <sup>3</sup>;

## Blockchain

General concepts (Proofs, Algorithms, Protocols) <sup>4</sup>; Ethereum <sup>4</sup>; J.P. Morgan Quorum <sup>3</sup>; IBM Hyperledger <sup>3</sup>; Parity <sup>3</sup>; Smart Contract <sup>2</sup>; Solidity <sup>2</sup>;

## Liens

---

- › [site] - <http://zenithar.org>
- › [blog] - <https://blog.zenithar.org>
- › [facebook] - <https://www.facebook.com/zenithar>
- › [github] - <https://github.com/zenithar>
- › [linkedin] - <https://www.linkedin.com/in/zenithar>
- › [mastodon] - <https://mamot.fr/@zenithar>
- › [twitter] - <https://twitter.com/zenithar>

## Miscellaneous

---

- › Musician: Drummer & Saxophonist
- › Writer (Blog)
- › 3D printing
- › Home automation
- › World cooking
- › Microbrewery
- › Home renovations