

Thibault Normand

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Application Security Engineer / Full Stack Developer / DevSecOps

Presentation

Passionated technical architect and security engineer, I like to treat projects combining these two skills. My experience in security and development allows me to have a different approach, especially be aware of security issues, in development lifecycle. I'm in permanent technologic exploration, always looking for the "best tool", and better skills to exploit.

Jobs expected : Technical Architect; Full Stack Developer; Technical Expertise; Consulting;
Domains expected : Security; Big Data; Machine Learning; BlockChain; IoT;

Professional Experience

N/C [Security Research and Development]

Toulouse - France

Application Security Engineer / Full Stack Developer / DevSecOps

October 2013 -

- › Malware alert event protocol for malware detection, and/or IOC reports. (Go, ElasticSearch, RabbitMQ, Protobuf, Snappy, WebHook)
- › Maltego transformation services. (Go, Neo4j, ElasticSearch)
- › Design and develop a malware analysis workflow for IoC extraction. (Go, RethinkDB, RabbitMQ, Docker, Cuckoo, VirusTotal, Yara, AngularJS 2)
- › "Cyber Threat Analytics" for data graph clustering research. (R, Neo4j, ElasticSearch, Machine learning, Clustering)
- › Malware exchange protocol for HoneyPots, Sandboxes, and Antivirus. (Protobuf, Compression, Crypto)
- › "Technical Threat Intelligence" platform for IoC feeds aggregation. (Go, RabbitMQ, ElasticSearch, Neo4j, AngularJS)
- › Malware submission portal service. (Go, RabbitMQ, MongoDB)
- › Security advisories portal service. (Go, RabbitMQ, MongoDB, AngularJS)
- › Discrete data analysis platform for automated behaviour classification. (Go, RabbitMQ, MongoDB, SciKit-Learn, Machine learning)
- › Malware decontamination autonomous service. (Go, AngularJS, Qt, ZMQ, Docker)
- › Risk coverage oriented SIEM rules exchange platform. (Go, MongoDB, AngularJS)
- › Microservice platform : email(compose, send, sign), autorization / authentication, token generation, licensing (Go, gRPC, Consul, Vault, Docker, Rancher)
- › Dashboards and software metrics monitoring (Go, Prometheus, InfluxDB, ElasticSearch, Grafana)
- › Security Code Review (Java / J2EE)
- › Intern mentoring.

INFOTEL [Software Research and Development]

Toulouse - France

Lead Developer / ScrumMaster

January 2010 - October 2013

- › High available, legally valuable and secure file deposit platform (RabbitMQ, Protobuf, Scala/AKKA, Java, Spring, ElasticSearch, AngularJS)
- › OAUTH 2.0 based SSO services. (Java, Spring, JWT, PKI, PKCS#11, HOTP)
- › Javascript application development. (jQuery, Backbone.JS, CoffeeScript)
- › Continuous integration. (Git, Jenkins, Sonar)
- › Doc as code workflow. (Git, Jenkins, Maven, Docbook5, XSLT, FOP)
- › Process management Web interfaces for DB2 / Z/OS. (Java, Portlets)
- › Quality and Security Code Review (Java, J2EE)
- › Product maintenance. (ClearCase, Java, Struts2, Eclipse RCP)
- › Intern mentoring.

SCASSI Conseil [IT Security]

Toulouse - France

Application Security Engineer

July 2008 - December 2009

- › EBIOS risk analysis based software design. (SOA, J2EE, .Net)
- › Risk analysis method generalization (UML)
- › Security code review (Java/J2EE, C/C++, PHP)
- › Reverse engineering, malware analysis
- › SOC Analyst for a local account.
- › Teacher for technical courses. (Virtualisation / Firewall and Access Controls)

Intern - Developer

October 2007 - June 2008

- › Design et develop an EBIOS related risk analysis tool. (Ruby, RoR)
- › Network and System administrator for small enterprise environment.
- › Web Application PenTest (from a developer side view).

Opencube Technologies [Numerical Media]

Intern - Developer

- › DFXP subtitle format decoding and visualisation API. (Qt, C++)
- › Digital Signal Processing for TeleText data extraction. (Linux, C++)

Toulouse - France
March 2007 - September 2007

MEDES / IMPS [Health / Space]

Intern - Développeur

- › Geographical Information System (GIS) visualisation component. (Java, Eclipse, RCP)
- › OpenSource GIS server enumeration report. (PostGIS, GRASS)
- › Network architecture, setted up a 'free' domain controller. (OpenLDAP, Samba, Kerberos, DHCP, DNS, NTP)
- › Virtualisation servers (Gentoo, Xen, VMWare)

Toulouse - France
March 2006 - August 2006

Karobas [Video Games]

Intern - System and Network Administrator

- › Network infrastructure desgin for game servers.
- › High Availability and Security.
- › Exchange 2003 Domain and Mail Services.
- › Database system migration, and software impacts.
- › Interactive 3D world designs (Virtools)

Sophia Antipolis - France
March 2005 - September 2005

Nice-Antiques.com [Art / Antique]

Intern - WebMaster

- › Design and develop a dynamic website. (PHP / MYSQL)
- › Commercial referencing campaign optimization.

Nice - France
March 2004 - July 2004

Education

IUP ISI

M2 ISI - Métamodélisation et Temps réel critique

- › Métamodélisation UML, J2EE, Programmation temps réel (ADA, C, SCADE), Droit

M1 Ingénierie des Systèmes Informatiques (ISI)

- › UML, Programmation distribuée (Java / J2EE, C), Base de données (avancé), XML, Mathématiques, Gestion

L3 Ingénierie des Systèmes Informatiques (ISI)

- › UML, Programmation (Java, C++), Base de données, Mathématiques, Gestion

Toulouse - France
2007 - 2008

2006 - 2007

2005 - 2006

IUT Informatique

Licence Professionnelle, Administration des systèmes et des réseaux (ASR)

- › Réseau, Administration système (Unix, Windows) / base de données (Oracle), Mathématiques, Gestion, Droit

DUT Informatique, Génie Logiciel

- › Réseau, Base de données, C, Java/C++, Programmation système, Mathématiques, Gestion

Nice - France
2004 - 2005

2002 - 2004

Lycée A. Camus

Bac S Sience de l'ingénieur, Spécialité Mathématiques

- › Mathématiques, Electronique, Mécanique, Informatique

Fréjus - France
- 2002

Certifications

- › MCP MS72-215 - Microsoft Windows 2000 Server

Languages

- › Français: Langue maternelle
- › Anglais: Lu, Ecrit & Parlé
- › Espagnol: Niveau bac

Skills

Functionnal

Project Management / ScrumMaster; Meeting management; Pedagogy / Popularizaion; Scienfitic publication writeup; Public talks; Technology Watch;

Languages

Go; JavaScript / ES6; Java; Ruby; Python; XML / XSLT; XML Schema / Relax NG; XSL-FO; Qt / KDE; C# (.Net); ASM (x86, ARM7); Scala; C/C++; PHP;

Databases

MongoDB; RethinkDB; CouchDB; CouchBase; Redis; Neo4j; MySQL / MariaDB; PostgreSQL; Hadoop / HBase; Oracle; SQL Server;

Operating Systems

Linux (Daily usage : ArchLinux); MacOS X; Windows;

Development Environment

Git / Mercurial; SVN / CVS; CMake; VisualStudio;

Web Framework

Node.js / Express; MeteorJS; Ruby on Rails; Django; Play! Framework; Microformats;

Frontend / UX

ES6 / ES7 / TypeScript; AngularJS 1 / 2; React / Flux; RxJS; CoffeeScript; Backbone.JS; Grunt / Gulp / WebPack; HTML5; CSS3 / SASS / LESS; Twitter Bootstrap; Google Material Design;

DevOps

LXC / Docker; Chef / Puppet / Ansible / SaltStack; Logstash / Fluentd / Graylog; Sentry; Consul / Etcd; Vault; Jenkins / TravisCI / DroneIO / GitlabCI; Kubernetes / Deis; CoreOS / Rancher; Prometheus / Gafana; Riemann.io;

Data Engineering

Machine Learning (SVM, PNN, RF, GBM); H2o; SciKit Learn; Protégé; R; Python / Jupyter / Pandas; Qlikview; Maltego; ElasticSearch / LogStash / Kibana (ELK); Linkurious;

Security

Cuckoo Sandbox / VMCloak; Suricata / Bro / OSSEC-HIDS; Honeypots (Cowerie / Kippo); DNS / SMTP Sinkhole;

Blockchain

Ethereum;

Embedded

Raspberry PI 2 / 3; Rasperry PI 1 / Zero; Basic electronic knowledge;

Java

J2EE; Spring (Core, MVC, Security, Data); Ant / Maven / SBT / Gradle; JPA / Hibernate; JUnit / TestNG; JBoss AS / Tomcat; Apache Storm; Apache Spark; Apache Kafka; Zookeeper;

Links

- › [Blog](#)
- › [LinkedIn](#)
- › [Github](#)
- › [Twitter](#)

Other activities

- › Batterie depuis Septembre 2013
- › Saxophone depuis l'âge de 11 ans dont 6 ans en conservatoire
- › Veille technologique (Sécurité, Logiciels, Techniques de management, Neurosciences)