

14 bd Maréchal Leclerc  
38000 Grenoble  
FRANCE

+33 649 805 431  
job@etienne.gandrille.me

# Etienne Gandrille, Ph.D.

**Expert in software development,  
specialized in Java Web technologies  
experienced in international collaborations.**



## Experiences

Since  
February 2015  
(4 years)

### **Commissariat à l’Energie Atomique et aux Energies Alternatives Research engineer**



#### **Eclipse sensiNact software committer**

- ▶ Development of an open-source middleware for the Internet of Things and Smart Cities.
- ▶ Software architecture and development of a time series database using Cassandra.
- ▶ Intellectual Property verification and source code transfer to the Eclipse Foundation.
- ▶ Eclipse sensiNact evangelization: Smart City Expo World Congress, Net Futures,...

*Team organization:* agile methodology using Scrum.

*Technologies:* Java, Spring Framework, Docker, Maven, Git, Cassandra.

#### **Main project: OrganiCity**

- ▶ Technical work package leader: coordination of partner’s software developments.
- ▶ Weekly phone meeting chairman.
- ▶ Deliverable writing and reviewing.
- ▶ Technical evaluation of candidates for the two Open Calls organized by the project.
- ▶ Project reporting in front of the European commission delegates.
- ▶ Front-end and back-end development of the service in charge of managing the federation of data coming from the cities involved in the project.

*Skill set:* project management, international collaboration, team coordination.

*Technologies:* Java, Spring Framework, OAuth2, Maven, Git, HTML, CSS, JavaScript.

#### **Technical consultant for project planning**

GREAT (GREnable Alps Together), I2PANEMA, DEFI-OC,...

*Skill set:* requirement collection and analysis, writing project proposal (in English and in French), numerous collaborations with industrial partners and governmental institutions.

2011-2014  
(3 years)

### **Orange Labs - Innovation center of Grenoble Research engineer for MEDICAL project**



Development, showcase and evangelization of iCASA, a middleware for securing senior citizens home environment and detecting warning signs of degenerative diseases related to aging. Collaborative project with Orange Labs healthcare division.

*Technologies:* Java, Maven, OSGi, iPOJO, Git, Jenkins, NFC, Bluetooth, Zigbee.

2008-2011  
(3 years)

### **ENSIMAG Laboratory (LIG) – Adele Team (Grenoble) Research engineer**



Development of CADSE, a tool for improving developers’ productivity.

*Technologies:* Java, Maven, Git, Hudson, Nexus, EMF/GMF, Eclipse RCP, OSGi, iPOJO.

## Languages

French  
**English**  
Spanish

Mother tongue.  
**Bilingual:** daily work and phone meeting chairman for more than 4 years.  
Intermediate level.

# Skills

---

## Software development

- ▶ Java platform: Java SE and Java EE, Spring Framework (Spring Boot).
- ▶ Web Services: Tomcat server, JAX-RS using Jersey, JPA using Hibernate, JSON mapping using Jackson.
- ▶ Software packaging and testing suites: Maven, Git and SVN, Jenkins, Nexus, Docker, JUnit and Mockito.
- ▶ Web development: HTML, CSS, JavaScript, JQuery, notions of TypeScript and AngularJS (prototype created).
- ▶ Databases and dataformats: Cassandra, MySQL, H2, JSON-LD, XML, XSLT, XML Schema.

## Project management

- ▶ Team coordination, international collaboration.
- ▶ Phone meeting chairman.
- ▶ Requirement collection and analysis.
- ▶ Specifications and technical documentation writing.
- ▶ Agile methodology practitioner (using Scrum) for software development.

# Education

---

2011-2014	<b>Ph.D. in Computer Science: Orange Labs / ENSIMAG Lab (LIG)</b> – Grenoble University (France) Specialized in Software engineering of Autonomic Systems. Dissertation Title: "Architecture-based autonomic adaptation of pervasive applications". Public defense: 12/12/2014.
2005-2008	<b>Academicals classes in soft science field</b> – Catholic University of Paris (France). Specialized in philosophy, anthropology and religions. Final grade: A.
2002-2005	<b>Engineering degree in Computer Science</b> – ISIMA / Clermont Auvergne University (France). Class ranking: 2 <sup>nd</sup> (final grade: B). <b>Master's degree in Computer Science</b> – Clermont Auvergne University (France). Class ranking: 2 <sup>nd</sup> (final grade: B).
2000-2002	<b>University degree in computing development (DUT)</b> – Clermont Auvergne University (France). Class ranking: 1 <sup>st</sup> .

# Others

---

37 years old, married, three children.

Driving license; international mobility.

Regularly attending Java community meetings: AlpesJUG, Google I/O extended,...

First aid training: fire extinguishers (2017), first aid diplomas (PSCC1 2015 and AFPS 1998).

## Publications scientifiques

---

- [ABCD+2019] Dimitrios Amaxilatis, Dennis Boldt, Johnny Choque, Luis Diez, **Etienne Gandrille**, Sokratis Kartakis, Georgios Mylonas, and Lasse Steenbock Vestergaard. Advancing Experimentation-as-a-Service Through Urban IoT Experiments. *IEEE Internet of Things Journal*, 6(2):2563–2572, April 2019.
- [BBEG+2017] Jorge Bernal Bernabe, Ignacio Elicegui, **Etienne Gandrille**, Nenad Gligoric, Alex Gluhak, Christine Hennebert, Jose L. Hernandez-Ramos, Carmen López, Andrea Manchinu, Klaus Möessner, Michele Nati, Colin O'Reilly, Niklas Palaghias, Antonio Pintus, Luis Sánchez, Alberto Serra, and Rob van Kranenburg. SocloTal - The development and architecture of a social IoT framework. In *2017 Global Internet of Things Summit (GloTS)*, pages 1–6. IEEE, June 2017.
- [GMD+2016] Levent Gürgen, Christophe Munilla, Rémi Druilhe, **Etienne Gandrille**, and Jander Botelho do Nascimento. Enablers for Smart Cities, chapter sensiNact IoT Platform as a Service, pages 127–148. Information Systems, Web and Pervasive Computing. John Wiley & Sons, Inc., July 2016.
- [Gan2014] **Etienne Gandrille**. *Adaptation autonome d'applications pervasives dirigée par les architectures*. PhD thesis, Université de Grenoble, 2014.
- [LCGH2014] Philippe Lalanda, Stéphanie Chollet, **Etienne Gandrille**, and Catherine Hamon. Maintaining Traceability Links between Design and Runtime Architectures to support Autonomic Management. In Frank Golasowski, editor, *Proceedings of the 8th International Workshop on Service-Oriented Cyber-Physical Systems in Converging Networked Environments (SOCNE)*, pages 19–24, Barcelona, Spain, September 2014.
- [GHL2013a] **Etienne Gandrille**, Catherine Hamon, and Philippe Lalanda. Design and runtime architectures to support autonomic management. In Anca Daniela Ionita, Grace A. Lewis, and Marin Litoiu, editors, *IEEE 7th International Symposium on the Maintenance and Evolution of Service-Oriented and Cloud-Based Systems (MESOCA)*, pages 75–84, Eindhoven, The Netherlands, September 2013. IEEE.
- [GHL2013b] **Etienne Gandrille**, Catherine Hamon, and Philippe Lalanda. Linking Reference and Runtime Architectures in Autonomic Systems. In *STO-MP-IST-115 - Architecture Definition and Evaluation*, pages 17-1–17-7. NATO Science and Technology Organization, May 2013.
- [CLM+2012] Stéphanie Chollet, Vincent Lestideau, Yoann Maurel, **Etienne Gandrille**, Philippe Lalanda, and Olivier Raynaud. Practical Use of Formal Concept Analysis in Service-Oriented Computing. In Florent Domenach, Dmitry I. Ignatov, and Jonas Poelmans, editors, *Proceedings of the 10th International Conference on Formal Concept Analysis (ICFCA 2012)*, volume 7278 of *Lecture Notes in Computer Science (LNCS)*, pages 61–76, Leuven, Belgium, May 2012. Springer.
- Keywords** Dynamic Applications, Microservices, Smartcities, Model At Runtime, Component Model, Service Oriented Architecture (SOA), Autonomic Computing