David **Bertoldi**

TECHNICAL LEAD · SENIOR SOFTWARE ENGINEER

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"Do or do not, there is no try."

Education

Univeristy of Milano-Bicocca   *Milan, Italy*

MASTER DEGREE IN COMPUTER SCIENCE   *Sept. 2017 - PRESENT*

- Focusing on Machine Learning, Mathematical Methods for Computer Science and Cloud Architectures
- **Exams:** Machine Learning, Advanced Machine Learning, Software and Data Architectures, Methods for Scientific Computing, Models and Computation, Probabilistic Methods for Decisions, Parallel Computing, Software Design, Large Scale Data Management, Cloud Computing, Software Development Process, Software Evolution and Reverse Engineering

Univeristy of Milano-Bicocca   *Milan, Italy*

BACHELOR DEGREE IN COMPUTER SCIENCE   *Sept. 2010 - Jul. 2014*

- Java language used as base programming language for the entire course
- Mainly specialized in Security
- **Thesis:** *Methodologies for the Analysis of White Box cryptographic implementations*
- **Exams:** Algorithms and Data Strictures I and II, Java Programing I, II and III, Operations Research, Operating Systems and Networks, Formal Methods, Computational Models, IT Security, C++ Programming, Information Theory, Analysis I and II, Discrete Mathematics I and II, Database, Software Engineering, General Physics, Software Testing and Analysis

Experience

SALESFORCE   *Monza, Italy*

SENIOR TECHNICAL ARCHITECT   *Dic 2021 - PRESENT*

OPENMIND   *Monza, Italy*

SOLUTIONS ARCHITECT   *May 2020 - Nov 2021*

- **Designed** the ecosystem for the new COIN E-Commerce that replaced the old one, with no change on the client's systems in place (SAP ERP, SAP FI, P2R, Jakala CRM and other interfaces and custom components):
    - An old Demandware implementation based on Site Genesis was completely replaced by a new **SFCC** instance based on SFRA
    - A Magento 2 instance, serving as **OMS**, was completely replaced by the new **Salesforce OMS**
    - An old MuleSoft Community Edition instance, serving as ESB, was completely replaced by lighter **AWS Lambdas**
- Enabled **marketplace features** for the new COIN E-Commerce through **Mirakl** platform that communicates with SFCC, Salesforce OMS and COIN's systems
- Organized and performed the **technical analysys** with the COIN's IT department in order to complete the discovery of the architecture in place.
- **Designed and developed** a software architecture for Max Mara's E-Commerce that conciliates the *World Wide*'s' integrations with China's ones, allowing developers to not have to use different repositories, encouraging software reuse and thus speeding up the development process.
- **Point of contact** for business and IT related topics: I'am often in contact with the client's **E-Commerce Manager** and the client's **CTO/Technical Architects**.
- Collaborating with **SAP** and **Magnolia** in order to standardize the SAP Commerce Cloud and Magnolia CMS integration and make it available into the **SAP Cloud** ecosystem.

SAP COMMERCE CLOUD TECHNICAL LEAD *July 2018 - PRESENT*

- Took **leadership** from technical and organization point of view of 3 different dynamic teams working for 4 different projects (Kiko Cosmetics, Castelli Cycling, Lloyds Pharmacy, Goglio Packaging Systems), for a total of **three B2Cs** and **one B2B** SAP Commerce Cloud E-Commerces.
- Took **leadership** from decisional and technical point of view for a **complete redesign** of Kiko Cosmetics E-Commerce, directing both technical and UX/UI teams. The project made Kiko Cosmetics be declared as **Absolute Winner during Netcomm Awards 2019** and **Best UX during Netcomm Awards 2020**.
- Replaced SAP Commerce Cloud's default CMS with the open-source solution **Magnolia CMS**, which increased client's productivity
- Conducted code reviews for internal junior and senior developers and for client's development teams, as well.
- Partecipated to pre-sale activities and invitations to tender for new potential clients, explaining and showing innovative solutions that may fits their needs.
- **Point of contact** for business and IT related topics: I'am often in contact with the clent's **E-Commerce Manager** and the client's **CTO/Technical Architects**.
- Actively taken part to the **development phases** of the projects, from the first stages and through all its evolutions.

REPLY

SAP HYBRIS TECHNICAL LEAD *March 2017 - July 2018*

- Designed and developed a B2B SAP Commerce Cloud storefront for Ferrero S.p.A., integrated with thier ERP systems through SAP Data Hub.
- Designed and developed a SAP Hybris **accelerator** to be used as a common layer for other 5 distinct B2C SAP Hybris storefronts, united by common logic and processes required by SPAR International.
- Took **leadership** from technical and organization point of view of an **Agile team**, working for 3 different SAP Hybris projects, developed for SPAR International.
- Several **migrations** in the SAP Hybris context:
  - From Hybris 5.5 to Hybris 6.6
  - From Hybris 4.3 to Hybris 5.5 (data only)
  - From IBM eCommerce Solution to Hybris 5.5 (data only)
- Almost always on site at the client's headquarters in Salzburg as a consultant for SPAR International, choosing and suggesting the best solution that fits their needs.
- Supervisor and single point of contact for **performance** tasks - resolution of the issues and design of compliant solutions.

SOFTWARE ENGINEER *Sept. 2015 - Mar. 2017*

- Developed in an **Agile team** an eGrocery shop for SPAR International (Austria) based on the **SAP Hybris Commerce solution (B2C)**. Involved in the integration of SAP Hybris system with other SAP Business solutions, such as **SAP ERP** and **SAP Finance**.
- Developed a **SAP Hybris storefront (B2C)** based on the **telco accelerator** for Wind.
- Implemented several Web Services with Java/Spring technologies and integrated in many SAP Hybris Commerce solutions.
- Took part in the analysis and the collection of the requirements for the client.

Programming

Java	Deep knowledge of **Java 11** language (academic usage of Java 17) and extensive experience in **J2EE**. Advanced knowledge of the **Spring** Framework and in particular with **MVC**, **Integration**, **Security**, **Data** and **Cloud** modules. Extensive usage for the proprietary solution **SAP Commerce Cloud**.
Python	Advanced knowledge with version **2.7** and **3.x**. Intermediate with **Django framework**.
C/C++	Fluent both with **C++98** and **C++11** versions, based on GCC implementation. Good experience with **MPI** (distributed parallel programming), **OpenMP** (multithreading programming) and **CUDA** (GPGPU)
DBMS	Deep knowledge of **MySQL** and **Oracle SQL** extensions. Some experience with **IBM Informix**. Good knowledge of **MongoDB**.
Containerization	Extensive knowledge of **Docker** (in swarm mode as well) and **Kubernetes** as orchestration tool. Experience with **Amazon ECS** and **Azure Container Serivice**
Web	HTML5, **JavaServer Pages** (JSP), **CSS** (and extensions like **SCSS** and **SASS**), **JavaScript** and its frameworks like **Angular**, **Vue.js**, **Node.js** and **jQuery**.
DevOps	Continuous Development: versioning with **Git** and **Git submodules**. Continuous Delivery: Build automation with **Maven**, **Gradle** and **Ant**. Continuous Testing: **JUnit** as main tool and some experience with **Selenium**. Continuous Integration: **Jenkins** pipelines, both for testing and production environments. Continuous Deployment: Usage of **Puppet** for code and confgurations deployment in a clustered environment. Continuous Monitoring: **Splunk**, **Nagios** and **NewRelic**.
Others	Interpreted language: **Ruby** with some experience on **Ruby On Rails** framework. Line shells: **Bash** and **Zsh**, usage on Fedora, Ubuntu and MacOS operating systems. Non-imperative: **Lisp** (CommonLisp dialect) and **Prolog**. Typesetting System: LaTeX, also used to create this document.

Skills

Methodoligies	Strong knowledge of the **Agile** methodology, in particular the **Scrum** framework. **TDD** and **Continuous Integration** as main development process.
Management tools	Extended expirience with Atlassian **Jira** for multiple projects, some of them depending on others. Good experience with **Confluence** for tracking requirements, deliveries and meeting notes.
CASE tools	**Visual Paradigm** for UML2 and SysML. Used sometimes for code generation and reverse diagram generation.
Performance tools	**JProfiler** as performance issues tracker used along with **Jmeter**.
IDEs	**IntelliJ IDEA**, **Eclipse** and **Emacs**
Operating Systems	Linux, very strong with **Fedora** 26+ (sponsored by Red Hat) and **Ubuntu** 17.4+ (Debian based) **MacOS** 10.13+ **Microsoft Windows** 7, 8, 8.1 and 10
Other softwares	**Microsoft Office** Suite: MS Word, MS Excelt, MS PowerPoint and MS Access **FileZilla** and **Transmit** as FTP/S3 clients. **PAC** for multiple ssh connections.
Other skills	I have played the **piano** since I was 4. I consider myself a good **chess player**. My personal record for solving a **Rubick cube** is 32 seconds.

Languages

English	Business fluent in written and spoken
Italian	Mother tongue
German	Beginner

Certifications

SAP Commerce Cloud 1905 Developer — *License s0018045744*

SAP CERTIFIED DEVELOPMENT PROFESSIONAL — *23 June 2020*

- issued by SAP SE

SAP Hybris Commerce 6.2 Developer — *License s0018045744*

SAP CERTIFIED DEVELOPMENT PROFESSIONAL — *31 July 2017*

- issued by SAP SE

Writing

100 tesi di crittografia e codici in Italia. 2008-2017 — *Aracne Editrice*

ISBN: 8825527527 — *2020*

- My thesis *Methodologies for the Analysis of White Box cryptographic implementations* was selected among others throughout Italy.
  I personally wrote a summary of my work that has been publshed inside this volume.

Towards Data Science — *towardsdatascience.com*

TECHNICAL WRITER — *March 2019 - PRESENT*

- Building a Pseudorandom Number Generator
  https://towardsdatascience.com/building-a-pseudorandom-number-generator-9bc37d3a87d5
- Storing a movie into π
  https://towardsdatascience.com/storing-a-movie-into-%CF%80-960ffcab4eed
- How to get an unbiased RNG from an unbalanced one
  https://towardsdatascience.com/how-to-get-an-unbiased-rng-from-an-unbalanced-one-dbb44850e5f7
- How to write your first Quine program
  https://towardsdatascience.com/how-to-write-your-first-quine-program-947f2b7e4a6f

Courses

2017	**German language course**, beginner course - A1.1 level	*Goethe Institut*
2018	**Hybris/Docker**, advanced integration	*REPLY*

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