

Christophe Andrey

M.Sc. Computer Science, EPFL



Java Software Architect

Born 2/2/1976 | Swiss national | single

Josefstrasse 137 | 8005 Zurich | +41 79 654 97 57 | info@andrey.net | www.andrey.net

Objectives

Design software applying state-of-the-art technologies.

Advise clients and coach coworkers in their software engineering efforts.

Why hire me ?

- Strong **analytical** skills → I solve problems efficiently, I optimize relentlessly my activities and I grab the “big picture” fast.
- 15 years Java** experience → I possess extensive know-how based on solid theoretical knowledge.
- Consulting** mindset → I pay attention to organizational and personal needs behind technical issues.
- Excellent **writing** skills → I write both documents and code with the same passion for quality.
- Intercultural** experience → I easily integrate myself into a team, even the most heterogeneous one.

Technical Skills

Expertise in	Software architectures, IT consulting, agile practices, Java microservices iSAQB Certified Professional for Software Architecture, Foundation Level TOGAF 9 certified, SAFe 5 agilist
Experience in	Service-oriented architectures, stakeholder management, database design and development, temporal databases, self-organizing teams, rapid prototyping, DevOps, geographical information systems
Java	15 years, since 1997. Developed batches, web services, Spring Boot applications, JSP and Thymeleaf pages, EJBs, applets, GUIs based on Eclipse RCP, Swing and GWT, and stand-alone applications Sun Java 2 Certified Programmer (2001) Sun Java Certified Enterprise Architect – part 1 (2007)
Frameworks	Spring Boot 2.1, Swagger 3, OpenShift, Hibernate 4, ArcGIS Pro SDK, Eclipse RCP 4.3, Struts 2.3, Google Web Toolkit 1.5, Bouncy Castle, EJB 3.1, OpenEJB
Applic. servers	JBoss 7, BEA Weblogic 6, Apache Tomcat 6, Websphere 6.1, ArcGis Server 10.4
Tools	IntelliJ, Eclipse 4.7, Maven 3, Git, openssl, HP ALM (Quality Center) 11, Visual Studio 2019, ArcGIS Pro 2.3, Toad
Databases	Postgres 11, Oracle 12, MS SQL Server 2000, MySql 5
SQL	2 years in 2000-2002, on MS SQL Server 6.5 and 2000. Developed stored procedures implementing financial functions on a database of stock exchange data. 20 months in 2003, 2009-2010 and 2015-2020 on Oracle
Other languages	C#, PHP, JavaScript, Json, XML, Unix shell, Visual Basic, XSD, UML
Methods	SAFe, Kanban, Scrum, RUP
Platforms	Linux Ubuntu and Mint, Windows 10, 7 and Vista, Mac OS X

Work experience

Feb. 15 - present Freelance and Akros for SBB - *Berne*

Software architect specialized in **rail network topology**

- Assumed the technical lead in two self-organizing, cross-functional DevOps teams.
- Designed alternatives ways to integrate a new GIS platform into an existing railway topology system (a temporal database with long transactions).
- Conceived, evaluated and verified alternative solution architectures.
- Built proofs-of-concept with ArcGIS Pro (C#), ArcObjects (Java) and Oracle Locator (PL/SQL) and then took part in the development of the chosen solution.
- Specified and implemented an optimization algorithm operating on graphs, which allowed for an efficient, automatic calculation of train schedules.
- Contributed to the overall design of the company's integrated topology platform (itop) by specifying a microservice combining the different aspects of a topology.

Dec. 13 - Feb. 15 Freelance for UBS - *Zurich*

Eclipse Rich Client Platform developer

- Developed highly customizable GUIs for the management of portfolios.
- Reversed-engineered parts of a proprietary framework based on RCP.

Mar. 12 - Sep. 13 Freelance for the Federal Department of Justice and Police - *Berne*

Solutions architect

- Designed the architecture, specified and prototyped a secure data processing pipeline transporting biometric data captured by private companies throughout the world and centralizing it into the Swiss visa application system.
- Defined a data exchange format for visa applications using XSD, RSA encryption, cryptographic message syntax and digital signatures based on the Swiss AdminPKI.
- Gathered and negotiated requirements for the system with its two sponsors: the Federal Office for Migration as data owner and the Consular Directorate as user.
- Formulated the technical requirements of a platform for various authorities to exchange electronic documents concerning foreign residents, and assessed the feasibility and architectural compliance of its business requirements.

June 11 - Jan. 12 Sabbatical: traveling, certifications, learning Spanish

Nov. 10 - May 11 Capgemini - *Zurich*

Consultant technical architecture

- Specified a data warehouse adapter for Postfinance.
- Gathered the requirements, prototyped and configured a Salesforce application for managing the sales pipeline in a branch of an automobile insurer. Delivered it as Software-as-a-Service (Saas) in the cloud. Trained twelve users.

Apr. 09 - Feb. 11 Capgemini for CSS Insurance - *Lucerne*

Technical architect and Java EE developer

- Designed, implemented and maintained GWT-GUIs integrated in a Siebel portal for managing contracts, as well as batches for calculating and printing commissions for brokers.
- Designed and implemented the architecture of a rule engine for calculating insurance offers, integrating it via SOA over six corporate divisions.
- Provided 3rd level support of the core system managing contracts, products and commissions.
- Coordinated emergency responses to production problems.
- Coached new hires in the development and support teams.

- June 08 - Mar. 09 Capgemini sd&m - *Zurich*
Consultant technical architecture
- Conducted an architectural audit of a real estate platform written in .NET.
- Designed an automatic data entry system as an ETL process integrated in an SOA, for a company providing financial data.
- Wrote bids (incl. raw architecture, effort estimates and presentations) pertaining to software re-engineering, application management, development off-shoring and staffing for companies in finance, logistics or real estate.
- Jan. 08 - Mar. 08 Erasmus Student Network - *Zurich, Besançon*
Chair of the Annual General Meeting
- Prepared and moderated a conference of 450 delegates from all over Europe.
- May 07 - Nov. 07 Freelance for UBS - *Zurich*
Java Developer
- Designed and developed interactive applications automating manual processes in a web portal using Swing.
- Jan. 05 - Mar. 07 Freelance for Steria - *Zurich*
J2EE Developer
- Specified and developed the web interface of a distributed monitoring system for highway tunnels, using Struts, Tiles and EJBs on JBoss 4.
- Built an automated unit test infrastructure based on Struts Test Case and HtmlUnit.
- Sep. 03 - Dec. 04 Sabbatical: economics courses, traveling, community involvement
- Apr. 02 - Aug. 03 Logica for Credit Suisse First Boston - *Zurich*
J2EE Developer
- Designed, developed and supported an e-Banking portal, using J2EE in a highly secured environment.
- Gathered the requirements for an online payment system and specified it, bringing together all involved stakeholders, from support to sponsors and from payment troubleshooters to Corba service providers.
- Ensured the platform's continuous operation during several months of its launching phase by providing the operations team with round-the-clock technical support.
- Nov. 99 - Mar. 02 Logica for BT&T Asset Management - *Zurich*
Consultant and Developer
- Developed an Intranet application for financial analysis and data management, using ASP, Java applets and servlets.
- Responsible for the design, implementation, rollout and maintenance of an automated data feed from Bloomberg into a legacy SQL Server database.
- Conducted and presented studies on documentation management, server performance optimization and database scalability.
- Oct. 98 - Mar. 99 Freie Universität Berlin
Diploma Thesis
- Contributed to the development of JacORB, a Java-based implementation of CORBA.
- Developed the authentication part of the security service by using certificates based on a public key infrastructure (SPKI).
- Aug. 98 Elca - *Lausanne*
IT-Security Intern
- Conducted an audit of the external internet security of the company.

July 97 - Oct. 97 UPMC - *Pittsburgh, PA*

System Administrator

- Maintained a 15-node Windows NT network and trained its twelve users.
- Chose software and hardware to purchase, installed it and troubleshot it.

Education

2003 - 2004	University of Zurich	Economics courses
1994 - 1999	Swiss Federal Institute of Technology (EPFL)	Master's degree in Computer Science
1998 - 1999	Freie Universität Berlin	Diploma thesis
1996 - 1997	Carnegie Mellon University (USA)	Exchange year

Languages

French	native
English, German	fluent
Swiss German	good

Teaching Experience

Summer 2004	Private - <i>Zurich</i> French Teacher - Gave beginner classes in French.
1998	EPFL - <i>Lausanne</i> Teaching Assistant - Taught basic programming to a class of 25 students.

Community Involvement

Nov. 03 - Apr. 10	Erasmus Student Network Europe-wide organization helping the cultural and social integration of exchange students - Organized cultural and social events. - Mentored foreign students and coached new members. - Managed legal, motivational and communication aspects of a crisis in the European network in 2009.
Nov. 03 - Mar. 08	Toastmasters International organization dedicated to developing the communication and leadership skills of its members - Co-founded one club and recruited new members.
Jan. 04 - Dec. 04	Students' Parliament An elected representation of the 23,000 students of the University of Zurich - Contributed to the formulation of non-smoking guidelines, which subsequently gained wide public acceptance in university buildings.