## Gabriel Klein

Mellette 2 CH-1081 Montpreveyres (+41 77) 405 21 90 35 y.o. (24<sup>th</sup> of November 1976) – one child Swiss and French nationality Master in Communication Systems
(ing.sys.com.dipl.EPFL)
Software Architect
gabriel.klein@nuage.ch
http://go.nuage.ch/cv

## **Profile**

Key member of two Swiss Startups rewarded by many awards (CTI, TechCrunch Europe, Strategis, Swiss Technology Award, AlpicT, IMD Startup Competition). I was one of the first and key technical employee to join these companies.

Expertise in many different fields like web development, mobile development, architecture, system administration, operational, R&D and good knowledge in management, hardware, product and project management. With this broad vision, I can help to architect a cross-domains solution.

## **Professional Experience**

SDataway (October 2011 – April 2012, 7 months)

as Software Developer and Architect

R&D Company with 15 employees.

I have worked on "Internet of Things" R&D projects, dealing with our customers to define the requirements, adapt as they need and implement part of these requirements.

My core projects were to conceive a web interface used by customers to access live data about their machines, and extend a Linux Embedded system (Ralink SoC) to connect some machines to our servers (JEE and PHP). With these tools, people are able to extract live and detailed statistics that are used by many different units: Technical, sales, business.

Poken (June 2008 – August 2011, 3 years)
as Chief Software Architect

Start-up of 5 to 30 employees. With this company we have created an event oriented product that facilitate interaction between people.

As a key responsible of our IT department, I had multiple roles adapted to the need of the company. Coach and build the software team, set agile process to create software, develop and maintain the Poken solution. Poken was a continuation of my master project and I have actively participated in the product idea and product creation at all levels: Vision, Project, Product, Execution, Architecture, and maintain production.

### Software Architecture ★★★

Choice and validation of our technologies (J2EE, MySQL, PHP, Glassfish), deployment methodology and agile software development (Hudson, Subversion, Ant), agile methodology. Leading the construction of our API (Jersey).

### CSA ★★★

**Due diligence**, technical relation with our partners.

## System administration and system architect ★★

Validation of our backup process, our platform was running on **Amazon Web Service**. Main operating system **Linux / Debian**. Worldwide high performance page delivery. (**Load balancing, Content delivery networks**). Certificate management **SSL / HTTPS** and **code signature**.

#### **R&D** ★★★

Technical exploration, validation of our technical approach and interaction with social networks. Interaction with external API, prototypes. Understanding of key concepts in social networks and feasibility in our platform. (**Rest, oAuth 1 and 2, Graph Object**)

### Databases ★★

Setup, optimized and configured our database in MySql 5.5.

### J2EE Development ★★★

Development of the core of Poken, development of our API, development and maintenance of the most complex parts of our product. EJB, JPA, JSF, Jersey, XML, XPath

### Mobile Development ★

Development and prototyping on **Android**, defined our NFC protocols.

### Project Manager ★★

Define the architectures and products goals, coach the team to follow agile process, order features development in an order that make sens from a technical point of view.

### Management ★★

Shared responsibilities and **coaching** of a team of about ten people distributed in Switzerland, Romania and California.

## AdsClick (December 2004 – May 2008, 3.5 years)

as Software Architect and Development Engineer

We have created an alternative to Google AdWords and AdSense in the domain of online marketing. I have build the most sensible parts of the platform in term of performance, high availability and quantity of data.

### Ad Server ★★★

Development of the ad-server, with an integration of external streams (XML, RSS) on the Java/Tomcat platform. Development of ads distribution algorithms. About 30 servers that serve more that thousands of ads per seconds during peek time. This product was used by Orange France (Wanadoo), one of the biggest website in France.

## Logs Processing ★★★

Processing of a really large quantity of information on MySql4, 5 (many gigabytes of logs generated per hours), extraction of various types of informations.

### HTML, Javascript ★★★

Interactive advertising, tagclouds, page analysis in JavaScript to extract most relevant keywords.

## Elanlt / IMD (September, October 2011)

as Blackberry, Android mobile engineer.

### **Epsic** (2004 à 2008, 20%)

as Teacher in the field of IT development and computer systems

### **IMD** (Mars-August, October-November 2004, 8 months)

as Social and people networks researcher.

The result was a product used and appreciated by the students of IMD.

### **Sunrise, Zurich** (Mars to September 2003, 7 months)

as Java developer, Oracle and .Net (C#)

## **Fabric | CH** (November 1998 to June 2000, 20%)

as HTML, C++ developer

### **EPFL** (during my studies)

as Websites developer, C++ developer

## Independent (since 1996)

as Development of Internet Websites for associations.

Help them to define their numeric identity (Name, color, logo.)

## **Technical Knowledge**

### Leadership, Management ★

Improvement of my managerial skills with a IMD coach, reading (**crisis management**, **leadership**), management of a **distributed team**, build an outperforming team.

## Methodology ★★

**Agile** (Many concepts similar to **Scrum**), **UML**, **human interaction**, tracking tools (**Jira** and **Trac**), versioning (**SVN**, **CVS**), unit and functional tests (**Junit 4** and **Selenium**), automatic deployments (**ant**, **hudson**, deploy-on-commit).

Developments patterns and SOA architectures.

Currently reading books on ITIL, TOGAF, Scrum

## Systems Administration ★★

Linux servers (**Debian**), clouds (**Amazon Web Services**, **EC2**, **ELB**, **S3**), high availability (**Load Balancer**, **Content Delivery Networks**), Monitoring (Watchmouse), certificates management (**HTTPS**, **SSL**, **code signing**), security strategies and backups

## Java, J2EE/JEE ★★★

Java 4, 5, 6, J2EE 5, J2EE 6. JPA (similar to hibernate), EJB 3, Glassfish 3 and Tomcat, development of API clients and servers using Jersey and Axis, REST, SOAP, XML et JSON.

### Social Networks ★★★

Development on **Facebook** (Open Graph protocol), Authentication on social networks using **oAuth**, **oAuth2**. Development using Twitter.

### Mobile Development ★★

Development of mobile applications on **Android** and **Blackberry** Phones. Excellent knowledge of the **NFC** protocol, **QR-Codes**.

### Hardware ★

Development of a Linux embedded system. Development in C (Ralink)

### Web Technologies ★★

HTML 4, 5, CSS, Javascript, jQuery, PHP 4 et 5

## Security ★★

Knowledge and usage of standards algorithms (MD5, SHA1), public/private keys, certificates, code signature, ssh

#### Databases ★★★

Expertise on MySQL 4 and 5, knowledge of some NoSQL databases (Neo4J et MongoDB), knowledge of Oracle (8 and 9).

### Hardware ★

Good knowledge of the advantages and limitations of the hardware and how to interact between hardware and software. Simple developments in C, flash. Personal interest (Through "Home Automation" and "Internet **of Things**")

## Advertising ★★

Good knowledge of ad distribution and optimization on Internet and social networks. (CPC, CPM, eCPM, social marketing, eCommerce). **AdWords** et **AdSense**.

## **Applications** ★★★

Excellent knowledge of **google apps** services, « **clouds based services** ». Installation, configuration and modification of open-source projects (with a focus on the Linux platform.)

## **Education**

### ing.sys.com.dipl.EPFL (2004)

as Engineer in Communications Systems EPFL,

with a Master in Communications Systems

## Certificat de maturité (1997)

with a Bac ès Sciences (High School Diploma)

### **EMBA MoT** ( 2012 – 2013 ) in progress

Starting end of August 2012 – every Friday.

This program is a joint program between EPFL and UNIL targeting entrepreneurship and innovation.

## Languages

French Native language

**English** Good, daily usage in a multi-cultural English speaking team, can explain

**German** Basic knowledge, stage in Zurich

# Leisures, activities and communities

Music I play trumpet in a local brass band

**Sport** Swimming

**Communities** Fire brigade (SDIS), JUGL (Java User Group Lausanne)

Computer Home automation (IoT), mobile development (android), web development