# 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

Other documents like work certificates and updated CV are available on my website.

# **Master in Communication Systems**

Availability: 2 days

# **Profile**

I'm an Agile Web Architect and Technical Lead with a master in communication systems. I've started a EMBA in entrepreneurship that will end in 2013 (MoT.epfl.ch).

My objective is to facilitate creativity and empowerment in a development team and work on amazing and innovative projects.



# **Education**

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

as Engineer in Communications Systems EPFL,

with a Master in Communications Systems

Professional Scrum Master PSMI (July 2012)

http://www.scrum.org/professional-scrum-master-i-ce/

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 and Saturday.

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

# **Work and Education From a Time Perspective**

Education and Certifications		Year	Work Experience	
Master in Business Administration  EMBA - EPFL / HEC Unil  (MoT.epfl.ch)		2013	2013.03 – 2012.09 ( 80% )	Sword Consulting Company
Professional Scrum Master	2012.07	2012		
		2011	2012.04 - 2011.10	SDATAWAY EPFL Engineer
			2011.10 - 2011.09	ElanIT / IMD  Mobile Architect and Developer
		2010	2011.06 -	Poken
		2009	2008.06	Chief Software Architect
		2008		
			2008.05 -	Ads-Click
		2007	2004.12	Software Architect & Developer
		2006		Engineer
		2005		
Master in Communcation Systems EPFL	2004.09		^^ 2008 - 2004	Epsic (20%) Teacher in the field of IT development and computer systems
ing.sys.com.dipl.EPFL		2004	2004 ( 8 months )	IMD Social and people networks researcher
		2003	2003.09 - 2003.03	Sunrise, Zurich Java developer, Oracle and .Net(C#)
		2002	`	ng my studies) Websites developer, C+
		2001	+ developer .  Fabric   CH ( 1998.11 - 2000.06, 20% ) HTML, C+	
Bac ès Sciences (High School Diploma)		1997	+ developer  Independent (since 1996) Development of Internet Websites for associations.	

# **Skills**

My vision of an agile architect is to be able to deeply understand all the different roles in a team, to coach them to build an architecture and facilitate the work of everyone. It means I've taken many different roles to make things happened and to have a coherent technical vision by facilitating decision on a solid ground.

#### **Software Architecture**

**UML modeling**, technology watch, interaction, white board, Google Docs, **software design patterns** and **SOA architectures**.

# **Project management**

Agile management of a team, I am certified **Professional Scrum Master** (PSMI), **human interaction.** Define goals and objectives, extract projects out of a vision and build a plan.

To support an agile methodology, I've used (and setup) tracking tools (**Jira** and **Trac**), versioning (**SVN**, **CVS**), unit and functional tests (**Junit 4** and **Selenium**), continuous integration by using automatic deployments (**ant**, **hudson / jenkins**, deploy-on-commit). I've worked with an Outsourced team in Romania and California.

# Leadership, Management

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

# **Systems Administration**

Linux servers ( **Debian, Ubuntu** ), 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**. Excellent knowledge of the **NFC protocol** and **QR-Codes**.

#### **Hardware**

Development of a Linux embeeded 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. Ethical hacker (love to find weakness of a system, for the love of technology.)

#### **Databases**

Expertise on MySQL 4 and 5, 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.)

# **Professional Experience**

**Sword Consulting** (September 2012 – now)

as Consultant in Web and Mobile Technologies

**SDATAWAY** (October 2011 – April 2012, 7 months)

as EPFL Software Engineer

R&D Company with 15 employees.

# with a role of Project manager

Define with the various actors of the project the scope and target using an agile / iterative approach. Share information about the advancement of the project, technical limitations and project estimates. Define a solution that conciliate the different points of view of different people representing the customer. Manage external companies to propose a design that follow the customer specifications.

# with a role of Web Architect, System engineer, DBA and Developer

Design, Build and implement the various technical parts of the project: Choose the architecture, manage and install the Linux server and SSL (https) certificates, implement backup plan, design the databases, develop the software using PHP and Java/JEE6, implement front-end interfaces and scripts, develop and improve a Linux SoC to share information with the server.

#### **Technical Environment**

Linux (Redhat), Apache2, HTML4/5, CSS3, JQuery, JSON web services, Google Chart Tools, Google Maps, PHP, Ajax JavaScript, MySQL, SVN, JEE 6, Glassfish, SoC Ralink (Embeeded Linux), SVN, eclipse

# Elanit / IMD (September, October 2011)

## as Mobile Architect and Developer

Architecture and Develop an e-Learning mobile application on Android and Blackberry's phones.

# **Technical Environment**

SOAP web services, Eclipse, Android SDK, Blackberry SDK, Amazon Web Services, SVN

**Poken** (June 2008 – August 2011, 3 years)

as Chief Software Architect

Startup of 5 to 30 employes. 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, Operational.

# Software Architecture

Choice and validation of our technologies, continuous integration methodology and agile process. Leading the construction of our API and core components. Split a complex system in simple manageable pieces, share the vision of the architecture using UML, face-to-face meeting.

# CSA

Define a software architecture and vision. **Due diligence**, technical relation with our partners. Simplify the life of our developers by finding and implementing process that simplify their life and make the product stronger.

# Project Manager as a technical project manager and Scrum Master)

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. Outsourcing.

# 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. Social Networks

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**

Design, setup, optimization and configuration of 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.

# 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 on-line 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.

**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 web identity (Name, color, logo.)

# Languages

**French** Mother tongue

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

**German** Basic knowledge, internship in Zürich

# **Hobbies**

Music I play trumpet in a local brass band

**Sport** Swimming

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

**Computer** Home automation (IoT), mobile development (android), web concepts and development