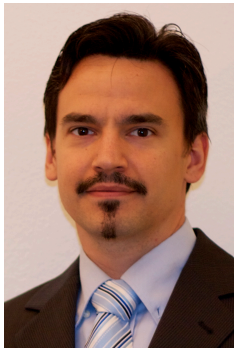

Curriculum Vitae

Family Name:	Fasel
First Name:	Daniel
Title:	Dr. rer. pol.
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E-mail:	df@scigility.com
LinkedIn Profile:	http://www.linkedin.com/in/danielfasel
Phone:	+41 79 202 47 89
Birthday:	14th of June 1981
Marital status:	Married
Children:	One two year old daughter
Nationality:	Swiss

Professional Experiences

Since October 2013

Scigility Inc., Founder and CEO, Marly

I founded Scigility in 2013. With Scigility, we provide consulting, software development, operations and training in the areas of large-scale information systems, NoSQL technologies and real time streaming solutions. Our goal is to provide the best performing solution using the best fitting technology available for our customers' problems!

February 2011 – October 2013

Swisscom AG, Data Warehouse and Business Intelligence, Liebefeld

Data Scientist. In this position I supported Swisscom to build a new discipline in analytics that is called Data Science. Data Scientists at Swisscom focus on **explorative analytics** of previously **unknown and unstructured sets of data**. We went beyond classical BI tools for analysis and applied new approaches in the area of **NoSQL technologies**. I have been the **1st Data Scientist at Swisscom** and **defined the role of the Data Scientist**, including recruitment of other team members. I have been a main contributor to the **first end-to-end use case** that has proven the added value of such a team and the corresponding technologies. On the more technical side, this position included the conception, implementation of **Hadoop and AsterData clusters** and the end-to-end implementation of analytical services on these platforms. We mainly use technologies such as **AsterData, Hadoop, Hive, Pig, Storm and plain Java Map/Reduce jobs** for analytics and discovery, **Sqoop** and **Teradata Parallel Transporter** for bi directional communication between the Enterprise Data Warehouse and the clusters, **Oozie** and **UC4** for job scheduling, **Hue, Ganglia** and **Teradata Viewpoint** for cluster monitoring. We have also analyzed software for connecting other BI tools such as the SAS and Micro Strategy to the clusters. Further, we defined the architecture of the clusters so that they are in accordance with the strict Swiss Law for data protection.

BI Architect. This position included the conception and development of **big scale Oracle Hyperion Essbase OLAP cubes**, the **conception and development of staging areas** for financial planning and Hyperion Essbase cubes. The cubes are employed for business steering on daily basis.

Business Engineer for Contract, Customer and Life Cycle Management. As Business engineer I was responsible for the **requirements engineering of five of the principal applications of the Swisscom data Warehouse**. Main consumers of these applications are the controlling department and the board of directors. Based on the end user requirements I derived the **concept and architecture of the applications and realized the Hyperion cube part of the applications**. These applications are mainly used for reporting and analyzing customer and contract inventory and their life cycle events.

System Administrator and Developer of Oracle Hyperion Essbase. As administrator for Hyperion Essbase cubes I developed and administrated big-scale **OLAP cubes for data analysis of contract inventory and traffic usage**. These cubes are used as the principal reporting source for the company's controlling department and the top management. Beyond the administration of the Essbase cubes, I was additionally **responsible for the Hyperion Essbase and Planning infrastructure**. This task included the administration of 6 Windows 2008 R2 server on which Oracle Hyperion Essbase 11.1.2.1 is running and 3 Microsoft MSSQL 2008 database servers. In total there are 111 cubes running on this infrastructure.

January 2009 – January 2011

University of Fribourg, Department of Informatics, Fribourg
System Engineer. I was responsible for the IT park of the department of informatics. This included the **administration of more than 30 Linux and Solaris Servers**, a **HPC cluster** based on Sun Grid Engine and **more than 300 public and private workplaces**. In this position, I was team leader and also **responsible for the IT budget** of the department. Additionally, I participated in the **informatics commission of the University of Fribourg**. This commission was responsible for the overall IT budget and strategy of the university.

PhD student at the Information Systems Research Group. Next to the System Engineer position, I continued my PhD study in the domain of Fuzzy Data Warehousing. I successfully finished my **PhD "Concept and Implementation of a Fuzzy Concept" in May 2012 with a Summa Cum Laude**.

January 2008 – December 2008

University of Fribourg, Department of Informatics, Fribourg
Research assistant and PhD student at the Information Systems Research Group. During my assistant position at the Information System Research Group, I was responsible for the course organization and exercises of the following courses:

- Master course E-Health, E-Business and e-Commerce: I organized the seminar courses and supervised the seminar theses.
- Database: I held the exercise class. The exercises covered practical work on relational databases (PostgreSQL, MySQL), NoSQL databases (CouchDB, BaseX) and Data Warehouse Reporting tools (Micro Strategy)

April 2004 – December 2008

Bernafon AG, Berne Bümpliz
Business Information System expert for the quality management team. In this position I implemented a new **process documentation system based on Aris Business Architect and Publisher**. This documentation system became the principal company handbook and was further the main documentation system for the ISO 9001 and ISO 13485 certification of the company.

3rd Level Support worldwide for the software Oasis Plus. I was responsible for the **3rd Level Support of the fitting software Oasis Plus**. This position included the communication between 1st and 2nd Level supporter and the development team. Further, I **visited customer for software diagnostics, testing and support across Europe**.

January 2006 – May 2006

Vocational School of Commerce, Fribourg
Lecturer on Informatics and Multimedia for the apprenticeship "Vendeurs Multimédia". This lecture included the basic architecture of computer and other electronic devices.

September 2002 – June 2006

Vocational School of Commerce and Industry, Fribourg
Lecturer on the following topics:

- **German** as foreign language for the apprenticeship "Berufssportler"
- **Informatics, Information and Communication** for the professional Matura
- **Telecommunication** for the apprenticeship in informatics
- **Class teacher** of the 4th grade apprenticeship class in informatics
- **Cantonal responsible for Information and Communication** in the German section

Internship

July 2006 – October 2006

Bernafon AG, Berne Bümpliz
During this internship I implemented a **diagnostic tool in C++** for the software Oasis Plus in order to support customers more efficiently when they experience software problems.

Education

2008 – 2012 **PhD study at the University of Fribourg, Fribourg**
2006 – 2007 **Master studies at the University of Fribourg, Fribourg**
2002 – 2006 **Bachelor studies at the University of Fribourg, Fribourg**
1997 – 2002 **College St. Michel, Fribourg**
1994 – 1997 **Secondary School, Plaffeien**
1988 – 1994 **Primary School, Rechthalten**

Diplomas

2012	**Doctor of Economics and Social Sciences (Dr. rer. pol.) with a Summa Cum Laude**
2007	**Master of Arts in Information Management**
2006	**Bachelor of Arts in Information Systems**
2002	**Matura with specialization in Biology and Chemistry** - Languages: German, French and English - Advanced Level Mathematics - Complementary specialization Psychology and Pedagogy

Technical Skills

Operating systems skill	As System Administrator for the Hyperion Essbase Infrastructure at Swisscom, I administrated 6 **Windows 2008 R2** servers. During the position as System Engineer at the department of informatics I administrated mainly Linux and Solaris servers. These servers were based on **Debian**, **Solaris 10, Ubuntu, RedHat Linux, FreeBSD, OpenBSD** and **Suse**. Further, I administrated workplaces mainly based on **Windows XP, Windows 7**, **Ubuntu Desktop** and **OpenSolaris**. Personally I use **Mac OS X (10.3 – 10.8)** since 2004. At my current position I participate in the "Bring Your Own Device" program and therefore I work mainly with Mac OS X.
Virtualization systems	At the department of informatics I administrated a **VMWare ESX** and **VMWare ESXi** infrastructure on which more than 20 Virtual Machines have been deployed. Further I conducted a project that aimed to implement a **Sun VDI** infrastructure for the public room workplaces of the university. For some special server application I installed and administrated a virtualization infrastructure based on **Linux KVM**. For mass deployment of software I used **Altiris SVS**. Further, I worked with different client virtualization programs such as **VMWare Workstation, VMWare Fusion, Parallels Desktop** and **Sun VirtualBox.**
Programming , script and markup languages, NoSQL technologies	For my PhD I developed a Fuzzy Data Warehouse that is mainly written in **Java and PL/pgSQL**. The front end bases on **JavaServer faces**. For the data transformation process I have mainly used **Python**. The meta-structure of the Fuzzy Data Warehouse is administrated in **XML** files that have predefined **XSD** schemas. For the Bachelor thesis I developed a tool in **Perl** for parsing and writing **LaTeX Bib** References in a database of university. At Swisscom I use mostly **Windows Batch**, **Unix Shells Scripts** and **Apple Scripts** for administration purposes. Additionally, I use **Oracle Hyperion Essbase Calc** and **Report Scripts**, **Visual Basics for Applications**, **MSSQL Stored Procedures** and **MS SISS** for the administration of the **Hyperion Essbase** cubes and the staging areas. On the **Hadoop** and **AsterData** clusters I regularly use **SQL-MR**, **SQL-H**, **Hive SQL, Pig, Java Map/Reduce** and **Sqoop** for data discovery, analytics and export. The following enumeration of technologies I evaluated for future integration into the Swisscom Big Data integration: **HBase, Cassandra, Storm, Mahout, Flume, Neo4J, SciDB**. I have basic knowledge in **SAP ABAP** programming, which I used mainly for creating interfaces for transferring data from SAP BW to the Hyperion Essbase cubes. Furthermore, I have used **PHP** and **HTML** for creating web sites on my private web- and email-hosting server. I created a diagnostic tool in **C++** during my internship at Bernafon AG and have basic knowledge of **C** from my study classes at the university.
Database and Data Warehouse systems	The Data Warehouse at Swisscom is a **Teradata RDBMS** installation, which I intensely use for data analysis. Furthermore, we apply clusters based on **Hadoop** and **AsterData** for data discovery tasks. I helped installing the clusters, do analysis on it and export aggregated data into the Data Warehouse and into the **Hyperion Essbase** Cubes. I also administrated the staging area for the Hyperion Essbase Cubes, which is based on **MSSQL** servers, and develop major parts of it. For my research activities and for exercise classes at the university I have used different relational and non-relational database systems such as **PostrgeSQL,** which is the basis of my Fuzzy Data Warehouse, **MySQL, Berkley DB, Apache Derby DB, Apache CouchDB, MongoDB, Oracle DB, Pentaho Mondrian** and **BaseX.**

Typesetting systems	For research documents, including my PhD thesis, I mainly use **LaTeX**. Additionally, I am an advanced user of **Microsoft Office** products such as Word, Excel, Access and OneNote. I also use regularly **Open Office** and **Apple iWorks**.
Business process modeling software	At Bernafon AG I implemented a new process documentation system based on **Aris Business Architect** and **Aris Business Publisher**.
Development tools	For Java programming, including the Fuzzy Data Warehouse, I generally use **Eclipse** with **Subversion** or **Git** for versioning and **Maven** or **Ant** for deployment. For script development I mostly use **TextMate** on Mac OS X or **Vim** on other Unix systems.
Web and e-mail server infrastructure	I operated a private web and e-mail server for more than 6 years, hosted several web sites and e-mail address for private persons and associations on this server. I first used a Mac Mini as server platform and later I switched to a custom build computer running Ubuntu Linux. As webservers I employed **Apache HTTP** and **Apache Tomcat**. For the e-mail server infrastructure I worked with the following tools: **Postfix, Courier IMAP, Dovecot, Exim4, Policyd, Maildrop, DSPAM, PostfixAdmin,** and **Roundcube Webmail**.

Language skills

German	Mother tongue
French	Very good oral and writing skills
English	Very good oral and writing skills

Hobbies

- Spending time with my family
- Sport: Hill climbing and fitness
- Fishing & Freshwater aquarium enthusiast
- Cooking, Reading and Photography

Publications

Daniel Fasel, Concept and Implementation of a Fuzzy Data Warehouse. In Meier, A. and E. Portmann, eds. Fuzzy Management Methods. Heidelberg: Springer. 2013 submitted for publication

Daniel Fasel, Concept and Implementation of a Fuzzy Data Warehouse. PhD thesis, University of Fribourg - Switzerland, 2012

Daniel Fasel, Khurram Shazad, Fuzzy Data Warehouse for Performance Analysis. In Meier, A. and Donzé, L., editors, Fuzzy Methods for Customer Relationship Management and Marketing: Applications and Classifications. IGP Global, 2012

Aleksandar Drobnjak, **Daniel Fasel**, Patrik Hugi, Michael Kaufmann, Andreas Meier, Joël Vogt, Edy Portmann, Roland Schütze, Luis Terán, Marcel Wehrle, Darius Zumstein, Führungsinformationssysteme unter Nutzung der unscharfen Logik – Fallbeispiel coop@home. Fribourg: Information Systems Research Group – University of Fribourg, 2011

Daniel Fasel, Khurram Shazad, A data warehouse model for integrating fuzzy concepts in meta table structures. In 17th IEEE International Conference and Workshops on the Engineering of Computer-Based Systems, pages 100–109. IEEE Computer Society, 2010

Daniel Fasel, Darius Zumstein, A Fuzzy Data Warehouse Approach for Web Analytics, Proceedings of 2nd World Summit on the Knowledge Society (WSKS2009), Chania, Crete, Greece, 2009

Daniel Fasel, A fuzzy data warehouse approach for the customer performance measurement of a hearing instrument manufacturing company, Proceedings of 6th International Conference on Fuzzy Systems and Knowledge Discovery (FSKD'09), Tianjin, China, 2009