# Franck Bettinger, PhD

## DATA SCIENTIST & SENIOR IT CONSULTANT

---

### Education

**2000 - 2004**
PhD in computer science, Imagine science and biomedical engineering (ISBE) group, University of Manchester, England.
Title of the thesis : Time varying appearance model.

**1999 - 2000**
MSc in advanced computer science, University of Manchester, England.
Specialty : artificial intelligence. Title of the thesis : learning visual odometry.

**1997 - 2000**
ENSIIE (*Ecole Nationale Supérieure d'Informatique pour l'Industrie et l'Entreprise*) formerly called IIE (part of the CNAM ; Centrale – Supélec competitive entrance examination).
Major in computer science and mathematics. Specialty : networks and operating systems.

---

### Work Experience

**2017 – today**
Backend software development and data analytics for JOB TODAY Sa :
- Development of micro-services related to identity verification, GDPR, data processing (Java, Kubernetes, AWS, Kinesis, Firehose, PostgreSQL, Redshift)
- Integration with third party tools (such as Appsflyer, Intercom and Mailgun)
- Data analytics on ranking, matching and application balancing (Python)

**2015 – 2017**
Applied research on electricity fraud detection for Choice Technologies Lux Sàrl through a project with the ministry of Economy and the University of Luxembourg (SnT) :

- Business analysis of clients requirements from a data scientist point of view.
- Exploratory data analysis, data cleaning and feature processing (R, Spark, python), dealing with a large amount of data.
- Research on new methods of detecting electricity fraud with a better precision and productivity on energy recovered (R, Spark, CNTK, $H_2O$).
- Assessment of research results through the creation of an in-house dashboard with contextual metrics (C#, Asp.Net MVC, Bootstrap, HighCharts, Google maps API, Hangfire, Oracle, SAP HANA).
- Assessment of research results through both simulations and real field inspections.
- Presentations of the results to the upper management.
- Transfer of research results to Choice Technology's Revenue Insurance software (C#, Asp.Net, R, DevExpress, Hangfire).
- Client support in production, on software as well as data analysis related topics. Assistance in the sale process.
- Management of a PhD Student and publication of results in journals and conferences.

**2007 – 2014**
Projects for the EDM (electronic document management) team for the Luxembourg Stock Exchange (throw FDM Luxembourg SA) :

- Migration of the electronic document management system (C#, Wix Toolset, Java and SQL).
- Development of a new software for legal entities management such as securities issuers, customers, contacts, etc. (C#, DevExpress, Java and SQL).
- Development of a document deposit system in the context of the Officially Appointed Mechanism (Java, Sonic, SQL).
- Analysis and adaptation of a suite of existing softwares in the context of Luxnext, a european economic interest grouping between Euronext and the Luxembourg Stock Exchange (Visual Basic, Documentum, Business Objects and SQL).
- Maintenance and improvements of the document management system used for securities admissions (Visual Basic, Documentum and SQL).

---

Skills required : Analysis, communication with other teams, capacity to find quick and live solutions in a production environment, bug corrections, tests and end user support.

2005 – 2007    Development of a reporting software for Conceptware Sàrl (C#, WCF, NetAdvantage, Composite UI application Block, Enterprise library, Oracle, PostgreSQL, MySQL, LLBLGen Pro, QuickGraph, CruiseControl.Net, Rational Clearcase, RUP, Software architecture)

1998 – 2003    Various short experiences including some teaching, the development of a face image annotation software for Genemation Ltd (C++, Qt, VXL and libvrml), some ETL work for the University of Manchester (Matlab) and Finite Ltd (C++) and the analysis of the numerical stability of a neural network library for Informatique CDC, part of *Caisse des Dépôts et des Consignations* (CESTAC method, C/C++).

## Skills Summary

Languages:          **C#** (.Net Framework / Mono), **Java**, Groovy, C++ (including STL), **R**, Python, Matlab, Windev, Caml/SML, Lisp, Prolog, Promela, C, Pascal, Basic, Visual Basic, Fortran, OpenCL, Assembly 68000, 80x86, ARM, Processing.

O.R.M.:             LLBLGen Pro, Entity Framework, NHibernate.

Tests:              NUnit, MbUnit, JUnit, EasyMock, Microsoft Test Manager, SoapUI, Selenium, Spock framework.

Internet / Networks:  HTML, PHP, XML, XSLT, MSMQ, Sonic, Web services, WCF, Shell unix, Tomcat, IIS, ASP.Net, ASP.Net MVC.

Systems:            Unix, Linux, MS-DOS, Windows, Android, Arduino.

Databases:          SQL, general methods of database design, SAP HANA, Hive, Oracle, PostgreSQL, Redshift, MySQL, Sybase, Sql Serveur, Documentum.

User Interfaces:    Qt, Gtk#, Winforms, Infragistics NetAdvantage, DexExpress (Winforms+Webforms+MVC), Bootstrap, Highcharts, Google maps API.

System integration:  CVS, SVN, Git, Synergy, TFS, Rational ClearCase, Rational Change, Jenkins, Cruisecontrol.Net, Nant, Ant, Maven, Nexus, Gradle.

Tools :             AWS, Kubernetes, Knime, Spark, Caffe, CNTK, MxNet, $H_2O$, Visual Studio, Wix Toolset, Reflector, NDoc, NDepend, FxCop, Monodevelop / Xamarin Studio, Hangfire, Eclipse / Android studio, Sonar, Business Objects, Rational Requisite Pro, Design patterns, Scrum methodology, Jira, Confluence.

## General information

Languages:          bilingual French / English, intermediate German and notions of Luxemburgish (course taken in 2006).

Hobbies:            movies, photography, billiard, tennis, cycling, board games (mainly strategic and resource management board games), prototyping, 3D printing and robotics.
                    Involved in the creation of a Fablab in Thionville.

## Contact

Franck BETTINGER
31 chemin de la Malgrange
57100 – THIONVILLE (FRANCE)
Mobile :        +33 6 65 63 92 25
Phone :         +33 9 52 17 60 88  (during the evening)
E-Mail :        fbettinger@free.fr
URL :           http://franck.bettinger.free.fr/