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 creative  
 passionate  
 analytical  
 visual

# Gilbert Perrin

Data Analysis & Visualization  
Frontend Engineering  
Business Analysis

French Citizen, born in 1969  
Living in Switzerland (permit C) near Lausanne  
Engineer and 2 Master's degrees

mother tongue - FRENCH  
B2 - ENGLISH

## Profile

I have three areas of expertise that all have in common my curiosity and my passion to understand the underlying business area I'm working on.

## Data Analysis and Visualisation

I design and create different kind of visual representations: complex interactive visualisations (for exploratory analysis) but also static posters or infographics or 'dashboard' views. Either on small datasets or large datasets, it may also include all or some of the different data analysis steps: data requirements, collection, data wrangling, processing, cleaning, exploratory analysis, modeling, product, communication. My goal: combine both aesthetic form and functionality to communicate information clearly and efficiently to the targetted audience.

## Frontend Engineering

I design and develop Frontend Applications, either at components level (visual components integrated into an existing application) or the complete client application. I can also develop quickly UI prototypes (interactive or static) or sketches to support an iterative approach (like Design Thinking) and elaborate complex user interactions and refine my ideas based on stakeholders feedbacks.  
My goal: constantly paying attention to details!

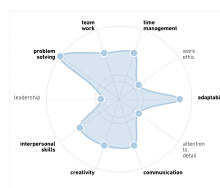
## Business Analysis

I can gather requirements, write functional specifications and model business process, either as part of a full 'Business Analyst' role or either as part of a 'Product Owner' role in 'scrum' organizations for example.

## Skills

### Top 6 Soft Skills

ADAPTABILITY  
CREATIVITY  
INTERPERSONAL SKILLS  
PROBLEM SOLVING  
TEAM WORK  
TIME MANAGEMENT



See [ig2gi.github.com](http://ig2gi.github.com) for more details.

### Hard Skills

Non exhaustive list of skills, sorted alphabetically.

AGILE  
ARCHITECTURE  
BALSAMIQ  
CONFLUENCE  
CSS  
D3.js  
DATA ANALYSIS  
DATA VIZ.

DATABASES  
DEEP LEARNING  
ES6  
HTML  
J2EE  
JAVA  
JAVA FX  
JAVASCRIPT

JIRA  
Node.js®  
PRODUCT OWNER  
PROTOTYPING  
PYTHON  
REQUIREMENTS  
SCRUM  
SPECIFICATIONS

UI DESIGN  
UX DESIGN  
WEB DEV  
WIREFRAMES

Note: the purpose of this list is to give an overview of skills but not to list all the libraries, frameworks or tools commonly used in development (eg: git, svn, maven, hibernate, ejb, mysql, pynum, jquery, ...).

## Certificates

2019

3m

### Deep Learning Specialization

machine learning

[Coursera Specialization by Stanford University.](#)

Foundations of Deep Learning, understanding how to build neural networks, and learn how to lead successful machine learning projects. Convolutional networks, RNNs, LSTM, Adam, Dropout, BatchNorm, Xavier/He initialization, and more. Implementation in Python, numpy and TensorFlow.

CERTIFICATE(S): C1 C2 C3 C4

2018

1m

### Introduction to the Biology of Cancer

biology - genetics

[Coursera Specialization by Stanford University.](#)

Molecular biology of cancer (oncogenes and tumor suppressor genes) as well as the biologic hallmarks of cancer. The course also describes the risk factors for the major cancers worldwide, including lung cancer, breast cancer, colon cancer, prostate cancer, liver cancer, and stomach cancer.

CERTIFICATE(S): C1

2012

3m

### Infographics and Data Visualization

data visualization

[Knight Center for Journalism in the Americas](#)

Knight Center for Journalism in the Americas: Data Journalism and Visualization with Free Tools.

CERTIFICATE(S): C1

## Work Experience

2019

1y 2m

### VP Functional & UX Design

healthcare - data-driven medicine

[Sophia genetics](#)

- Responsible for all functional requirements and in charge of evolving the SOPHiA Platform and ensure consistency across the business areas
- Managed Feature Requests & Product Backlog
- Approving (sign-off) or rejecting developed Features
- Implementation of prototypes (UI)

2018

3y

### Head of Front-End Development

healthcare - data-driven medicine

[Sophia genetics](#)

- Managed & led a team (4p) in charge of development of functional features for the SOPHiA DDM Platform
- In charge of functional requirements & specifications
- Designed & Implemented a Web Application for the administration of the SOPHiA DDM platform, currently used by the Support Team
- Actively participated in 2 CTI projects (Commission for Technology and Innovation, now Innosuisse)
- Developed functional & technical features on the SOPHiA DDM platform (backend & front-end)
- Implemented several web applications and infographics for internal usage (realtime WorldMap for sophia sequencing usage, people faces, statistics, ...)
- Gene / Transcript viewer in d3.js (personal work)

## Work Experience cont.

2015

2y

### Data Visualisation Engineer

healthcare - data-driven medicine

#### Sophia genetics

- Managed the migration of the SOPHiA DDM Platform from a web application to a Java / JavaFX application: architecture, design & implementation of the core components & screens
- Developed core JavaFX components (authentication, visual components, application components ...)
- Designed & implemented a dynamic Circular Genomic Viewer (circo plot) implemented in d3.js & HTML5.

2013

4m

### Data Visualization, Web Developer

healthcare - nonprofit organization

#### International AIDS Society

- Designed and implemented an interactive world map for the website of IAS ( International AIDS Society). (javascript, D3.js, SVG, CSS)

2012

3y 2m

### Senior Software Engineer

finance - private banking

#### Pictet Asset Management

- Business and Technical analysis and development on a Web CRM
- Business and technical analysis of a new cash management module for a Portfolio Management System - design & implementation of both server and client side.

2009

1y 1m

### One sabbatical year stuying Photography

photography

#### Photography

- Courses, self-training, travel (Canada), photoreports
- 4 months photo-reporter internship at Police Cantonale Vaudoise
- Photographer at 'La nuit des musées, Lausanne' several years (2009, 2010, 2011, 2012).

2008

1y

### Senior Software Engineer

broadcast media

#### RTS - Radio Télévision Suisse

- Architecture, design and implementation of a Workflow-based collaborative application for the completely tapeless, digital production of television programs - architected around REST principles for data integration
- Wrote use-case catalog, architecture, component and framework selection, implementation planning, design and implementation.

2007

1y 4m

### Senior Software Engineer

industry - energy

#### Neo Technologies

- Re-engineering of the in-house electricity-management logistics platform to open it to third parties and to extend the range of managed goods to gas, digital media, etc
- Reverse-engineered use-cases, sequence and class diagrams of the pre-existing system
- Wrote new use-cases and specifications by interviewing all platform stakeholders
- Architected, designed, implemented the augmented system.

## Work Experience cont.

2005

1y 4m

### Senior Software Engineer

[Pictet Asset Management](#)

finance - private banking

- Analysis and design of an infrastructure for notification of changes between applications
- Specific implementation for cache invalidation of the pms application
- Architecture and design of a batch framework which provides an asynchronous, server-based batch processing environment that can wrap, execute and monitor business tasks.

2005

1y 7m

### Senior Software Engineer

[DALIN Software SA](#)

finance - private banking

- Developed a knowledge-based interface (API java 2d) - developed a prototype
- Analysis of a natural language query system - produced analysis and design specifications.

2004

3y 7m

### Java J2EE Senior Developer

[Odyssey Asset Management](#)

finance - private banking

- Design and implementation of a business tag-library to communicate with EJB service layer
- Design of web components - technical person in charge of the EJB layer - responsible for the programming, packaging and deployment environments.

2000

2y

### Java Developer

[BIPE](#)

industry - telecommunication

- The principal activity was the migration and the development of an existing data warehouse under (4D) towards new technologies Java and Web within a team of 4 people

1997

2y 3m

### Thermal Engineer and Data Scientist

[Spie Batignolles](#)

industry - energy

- Head of a Computation Group working on Operational Projects
- Analysis and calculations of the air-conditioning of an enclosure of storage of nuclear waste in Novossibirsk (Siberia)
- Design and sizing of smoke-evacuation in tunnels using the SES (Subway Environmental Simulation) software
- New module implementation (FORTRAN) taking account a new physical model.

## Education

1998

1y

### Master's degree in Computer Science

computer science

DESS IAO

One year post graduate degree with honours: algorithms, programming languages (Java, C++), database systems, operating systems, language processing, software engineering, multimedia, networks.

1994

1y

### Master's degree in Thermodynamics and Fluid Mechanics

physics, data science

IUSTI - CNRS

One year post graduate degree with honours: Thermodynamics in open systems, fluid mechanics, energy, statistical thermodynamics, mathematics, physical transfer in complex fluids, ...

CERTIFICATE(S): IUSTI - CNRS

1993

3y

### Three Years Engineering School - Energy, Thermics & Fluid Mechanics

physics, data science

IUSTI - CNRS

Bachelor + 5. Power systems, physics, heat and mass transfers, numerical modelling, advanced materials, ...

CERTIFICATE(S): IUSTI - CNRS

1990

2y 1m

### Classe Préparatoire - Math SUP/SPE

mathematics

Lycée Militaire Aix-en-Provence

Mathematics and Philosophy

CERTIFICATE(S): LYCÉE MILITAIRE AIX-EN-PROVENCE