

Gilbert Perrin

Data Analysis & Visualization Frontend Engineering

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

> mother tongue - FRENCH **B2 - ENGLISH**

Profile

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

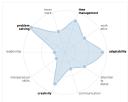
I design and develop Frontend Applications, either at components level (visual components integrated into an existing application) or the complete client application. I can also develop quickly UI prototypes (interactive or static) or sketches to support an iterative approach (like Design Thinking) and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

My goal: constantly paying attention to details!

Soft Skills

Top 4

TIME MANAGEMENT **CREATIVITY** PROBLEM SOLVING ADAPTABILITY



See ig2gi.github.com for more details.

Hard Skills

Certificates

Deep Learning Specialization

machine learning

▶ 3 m

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

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

Work Experience

VP Functional & UX Design

healthcare - data-driven medicine

1y 2m

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

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 participed 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)

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 (circos plot) implemented in d3.js & HTML5.

Work Experience cont.

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)

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.

One sabbatical year stuying Photography

photography

1y 1m

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).

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

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.

1y 4m

Senior Software Engineer

finance - private banking

Pictet Asset Management

- · 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.

Work Experience cont.

Senior Software Engineer

finance - private banking

- **DALIN Software SA**
- · Developed a knowledge-based interface (API java 2d) developed a prototype
- \cdot Analysis of a natural language query system produced analysis and design specifications.

2004

Java J2EE Senior Developer

finance - private banking

3y 7m

- Odyssey Asset Management
- · 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.

Java Developer

industry - telecommunication

BIPE

· 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

industry - energy

Spie Batignolles

- · 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

Master's degree in Computer Science with honours

computer science

DESS IAO

algorithms, programming languages (Java, C++), database systems, operating systems, language process, ...

1994 10m

Master's degree in Thermodynamics and Fluid Mechanics with Honors physics, data science **IUSTI - CNRS**

Thermodynamics in open systems, fluid mechanics, energy, statistical thermodynamics, mathematics, ...

CERTIFICATE(S): IUSTI - CNRS

Education cont.

Three Years Engineering School - Energy, Thermics & Fluid Mechanics physics, data science **IUSTI - CNRS**

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

CERTIFICATE(S): IUSTI - CNRS

Classe Préparatoire - Math SUP/SPE

mathematics

Lycée Militaire Aix-en-Provence Mathematics and Philosophy

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