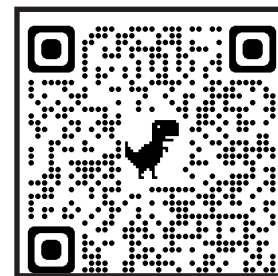


# CHARLES LAVERDURE

ENGINEER IN GEOMATICS  
SPECIALIZED IN PROGRAMMING & DATA ENGINEERING



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#### SOCIAL NAMES

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FRANCE

## PROFILE

Junior engineer of 24 specialized in geomatics with a keen interest in programming, research and data representation. Scientific and international background having earned experience in the US, Canada and France. I am now specializing in programming and data management and sciences.

## EDUCATION

2021 - 2022

### SPECIALIZED MASTER'S DEGREE TSI (Information Science Technology)

Ecole Nationale des Sciences Géographiques  
(Paris, IdF, FRANCE)

2019 - 2021

### GENERAL MASTER'S DEGREE GEOMATICS

Ecole Nationale des Sciences Géographiques  
(Paris, IdF, FRANCE)

2016 - 2019

### UNDERGRADUATE STUDIES CIVIL ENGINEERING

McGill University  
(Montréal, QC, CANADA)

2014 - 2016

### FRENCH BACCALAUREATE & US HIGH SCHOOL DIPLOMA

French-American School of New-York  
(New-York, NY, USA)

## SKILLS

- Programming
- Data management
- Geomatics
- Communication
- Graphic design

## LANGUAGES

- **FRENCH** - Native
- **ENGLISH** - Full professional proficiency
  - TOEIC (2020) : 990 / 990
  - TOEFL (2016) : 102 / 120
- **SPANISH** - Professional proficiency
  - European B2 level

## PROGRAMMING

SPECIALIZED IN	HAVE NOTIONS IN
<ul style="list-style-type: none"><li>• Python</li><li>• R</li><li>• JavaScript</li><li>• HTML, CSS</li><li>• Git</li></ul>	<ul style="list-style-type: none"><li>• SQL</li><li>• PostGRE</li><li>• Java</li><li>• PHP</li><li>• C, C++</li><li>• MATLAB</li></ul>

## WORK EXPERIENCE

### DATA ANALYSIS INTERNSHIP

ARCEP (Paris, France)

May 2022

Nov 2022

End of studies internship as a mobile deployments data analyst for the French telecommunications regulatory body. Created new indicators and automated statistics and data visualisation processes. Handled geographic and mobile telecommunications technical data. I worked as part of the operating units being assisted and reviewed by the specialized data analysis team.

- **Python** programming in **big data** using the **Jupyter notebook environment**.
- **SQL** and **Microsoft Excel** for data engineering and organization.
- **Graphical, statistical** and **technical** reporting.

### ENVIRONMENTAL RESEARCH INTERNSHIP

The James Hutton Institute (Aberdeen, Scotland)

May 2021

Aug 2021

Summer internship for the end of my second year of master's degree. I had to develop an application under R to perform statistical and qualitative operations on data retrieved via ESA's SENTINEL-5p's API. I had to generate Generalized Additive models to automate the interpolation of large datasets to retrieve rasters with a resolution of 7 square km over Scotland.

- **R language** programming applied to **data, environmental and statistical sciences** on very **large datasets**.
- Learned to work in a **research** environment using **AGILE methodology**.
- Had to **work remotely**, in **autonomy** and in **English**, using tools like **github** and **Microsoft Teams**.

## TECHNICAL SKILLS

### Operating systems

- LINUX (Most used)
- Mac OS
- Microsoft Windows

### Geomatics software

- COVADIS
- autoCAD 2D / 3D
- QGIS
- ArcGIS
- MicMac (photogrammetry)

### Organization / Com

- Google applications
- MS Office Suite
- GIT
- Redmine
- MS Teams, Discord, Litchi
- Synology

## QUALIFICATIONS

2018

### WHMIS Certification

Laboratory security certification.

2019

### Driver's license

2016 - present

### Academic paper redaction

See my website to consult a selection.

2020 - present

### Multiple open-source programming projects published

I regularly post my advances on personal projects related to geomatics or financial analysis and even image treatment.

## WORK EXPERIENCE (CONTINUED)

### BUSINESS DEVELOPMENT MANAGER

2020

Vertigeo (Junior Enterprise)

2021

Part of the 2020-2021 mandate for the management of the student-run company at the Ecole Nationale des Sciences Géographiques (ENSG). I was in charge of prospection and brand management during the most prolific year on record at the junior enterprise. We were able to successfully canvass and complete 11 missions totalling more than 10,000 euros in sales revenue.

— **Marketing and business management** as well as **client relationship** and **prospection** with supervision of various **real-life geomatics projects**.

### GEODEV 2 COMPANY - SCHOOL PROJECT

Jan 2021

ENSG / SWORD group

May 2021

Creation of a web-integrated tool allowing a user to add and see georeferenced 3D photos inside a BIM model. With a group of 4 people, we had to deliver a ready to use solution to the SWORD group's branch specialized in geomatics. We chose this project from a handful of projects brought by our school.

— Our project was developed as a **web application** using **HTML, CSS, JavaScript** and **php**. We had to manage the **front-end** and **back-end** of the app.

— Our **database** was managed via **phpMyAdmin** thus using **SQL**. Finally, we had to use **python** for the calculation of the pictures relative positioning.

### FIELD INTERNSHIP

Jun 2020

ENSG / IGN (French National Geographic Institute)

Jul 2020

2-month internship divided into five distinct projects. Part of our school program to discover and get hands-on experience on most of the fields related to geomatics.

— Learned to master technics in **remote sensing, photogrammetry** **surveying jobs, metrology, GPS** and other **positioning systems technologies**.

### WINDOW CLEANER

2017

Vitres.net (Montréal, CANADA)

2018

Summer job for two consecutive years as a window cleaner during my first years at university.

— Brought me a lot of **humility** and the **taste for hard work**.

## PERSONAL



Community service



Football



Programming



PPL license

## REFERENCES



### ALESSANDRO GIMONA

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