

# Data Visualization and Data Storytelling

Emmanuel Génard – <u>genard@fr.ibm.com</u>
Solution Architect, Data Analyst, Data Engineer, Data
Scientist
IBM Global Industry Solutions Center, France



# HELLO!

#### I am Emmanuel Génard

Emmanuel has been in various Technical pre-sales and consulting roles (Solution Architect, IT Architect, Data Scientist, ...) target at customers and Business Partners. He has been working for IBM for more than 20+ years delivering solution design, architecture design, doing business development, technology assessment and proof of concepts, education and technology influencer.

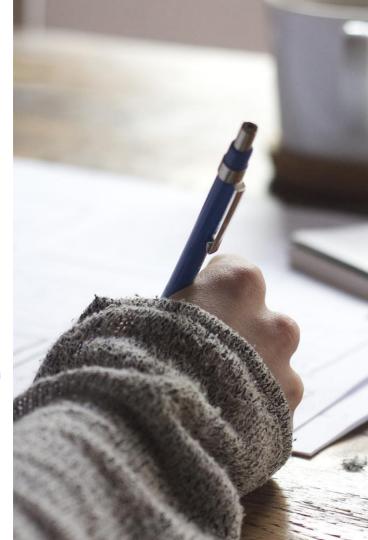
Emmanuel has 20+ years of experience with large Retail accounts and 5 years experience dealing with Government Agencies on topics such as:

- Public Safety
- Smarter Cities
- Customs and Border Management

Wih a strong focus on data management, advanced data analysis and data visualization, Emmanuel is a mix of data engineer and data scientist.

You can find me at @manuGenard

genard@fr.ibm.com
http://fr.linkedin.com/in/egenard
@manuGenard



## **Class objectives**

#### **UPON COMPLETION YOU WILL HAVE**

A good understanding of the **basic concepts** of Data Visualization Knowledge to perform **data acquisition**, **preparation and analysis** Full understanding of visual perception Experience on selecting the most impactful **visual elements** A good understanding of the concepts of story telling and data visualization interactivity

## Agenda

|  |               | November 7th , 2019  |
|--|---------------|--|
| Fundamentals and Big<br>Ideas                  | 08:00 - 08:30 | Introduction   |
|  | 08:30 – 10:00 | What is Data Visualization and Why use it?                 |
|  | 10:00 – 10:30 | Let's talk Data Science and Exploratory Visualization      |
|  | 10:30 – 10:45 | Coffee Break   |
|  | 10:45 – 10:55 | What's your own definition of Data Visualization?          |
|  | 10:55 – 11:15 | Nobel Prices & Laureates - Obesity vs. Education Challenge |
|  | 11:15 – 12:00 | Working with Data  |
|  |               | Lunch break  |
|  | 13:00 – 13:20 | Tools  |
|  | 13:20 – 14:00 | Data Lab   |
| Design<br>Principles and<br>Visual<br>Elements | 14:00 – 15:15 | Visual Encoding  |
|  | 15:15 – 15:30 | QUIZZ Part 1   |
|  | 15:30 – 15:45 | Coffee Break   |
|  | 15:45 – 16:50 | Work on a DataViz – Work on your Data                      |
|  | 16:50 – 17:00 | Day Wrap-up & Conclusion                                   |

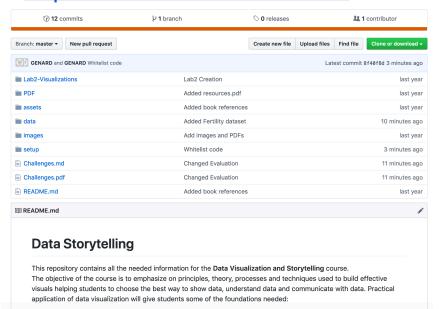
## Agenda

|                   | November 13th , 2019 |   |
|-------------------|----------------------|---|
| Data Storytelling | 09:00 – 09:10        | Day one recap – Day two objectives              |
|                   | 09:10 – 09:30        | What is Data Storytelling?                      |
|                   | 09:30 – 10:15        | Narrative Structure and Storyboarding           |
|                   | 10:15 – 10:30        | Get your headline and Storyboard                |
|                   | 10:30 – 10:45        | Coffee Break                                    |
|                   | 10:45 – 11:20        | Interactivity – Pulling it all together         |
|                   | 11:20 – 12:00        | Working with Data and Exploratory Visualization |
| Evaluation        |                      | Lunch break                                     |
|                   | 13:00 – 14:30        | Finalize your Group work                        |
|                   | 14:30 – 14:45        | Coffee Break                                    |
|                   | 14:45 – 15:00        | QUIZZ Part 2                                    |
|                   | 15:00 – 16:50        | Group work Evaluation – Timed presentation      |
|                   | 16:50 – 17:00        | Wrap-up & Conclusion                            |

### Content

#### All the content is being posted online

- » Blackboard
- » GitHub repository
  <a href="http://ibm.biz/EDHEC\_DataViz">http://ibm.biz/EDHEC\_DataViz</a>





You'll be evaluated throughout the course in several ways:

- » Participation
- » Personal work: quizz, challenges
- » Group work:

Groups of 3 to 4

Identify a topic and a 'Business Question'

Gather and prepare your data

**Sketch/Mockup** a Data Visualization

Build a story

Timed-presentation in front of audience

Your audience will listen to you, eventually ask questions **once timer** is elapsed.

### **Bonus**

Implement your Data
Visualization in a Tool of
your choice (Tableau
Software)

## THANKS!

## Any questions?

You can find me at

- » @manuGenard
- » genard@fr.ibm.com