TC311: Technology for Data Visualization and Analysis

$495.00

4 weeks

Are you analyzing your data efficiently and displaying them effectively? Nearly all of us are responsible for producing reports for our colleagues, supervisors, and clients. Good data visualization is essential to analyzing your data quickly and making an impact on those who see it.

Course Description

The importance of data visualization has become apparent in the current era of 'big data' that we live in. Effectively visualizing data can lead to recognizing key information quicker and demonstrating impact more effectively.

This four-week online certificate course will focus on building skills and strategies to better visualize and analyze data using a variety of tech tools. It will feature live interactive guest expert presentations with leading M&E practitioners, software developers, and data scientists. It will also include a unique hands-on learning environment with animated videos, technology demos, practical activities, networking events, immersive simulations and more.

Effective data visualization requires both critical thinking skills and technical skills. During this course, we'll walk you through the step-by-step design process, which encompasses both skillsets.

You'll learn:

- What data visualization is and why our brains respond so well to graphics;
- Which up-and-coming trends in the data presentation field and in software development worth paying attention to;
- How to design charts that fit your unique stakeholders' information needs and interests;
- Which dissemination format is best for your project–like static graphs within reports, handouts, presentations, or infographics, or interactive graphs within dashboards, websites, animated videos, and GIFs;
- Chart choosing tips, like which layouts are best for showcasing time series data, part-to-whole relationships, geographic patterns, or nested data;
- Strategies for displaying qualitative and text-based data, like sentiment analysis, color-coding, timelines, calendars, and diagrams;
- How to select and use software tools–Excel, R, Tableau, mapping programs, and more–that are best suited to your chart type of choice; and
- Which default settings in your computer program need to be adjusted to ensure that your graph follows best practices. For example, you'll learn how to write titles, subtitles, and annotations that capture your desired takeaway messages; how to highlight your key findings with color; and how to ensure that your visualizations are readable for viewers with colorblindness.

Participants will create data visualizations and get feedback from the course's experts, facilitators, and fellow participants. For example, during Week 1, you'll consider your audience's information needs, the dissemination format for your visualization, what types of data wrangling techniques are needed to get your dataset ready to visualize, and key data responsibility issues. During Week 2, you'll learn to select the best chart types for your dataset–beyond the overused pie chart and bar chart–and you'll begin prototyping your visualization. During Week 3, we'll dive even heavier into tools, and you'll hear from experts about Tableau, R, and more. During Week 4, you'll continue editing your visualization to ensure that it follows best practices in alignment, color, text, and more.

Your viewers will understand your data at a glance and retain information for the long run. We hope to see you online in November!

For a more detailed syllabus, please click here.

Course Topics and Featured Tech

- Data visualization fundamentals
- Prototyping data visualizations
- Qualitative data analysis/visualization
- Key chart types for M&E

Course Objectives

At the conclusion of the course, participants will be able to:

- critically analyze both the opportunities and the pitfalls that emerge when working with technology to visualize data.
- connect relevant development theories to the technological strategies and tools discussed in the course.
- manage specific software platforms and tools for data visualization activities
- design dynamic and effective strategies for using tools and platforms improve data visualization efforts.
- develop critical self-confidence for working with technology to address data visualization challenges.

Course Methodology

- This course is delivered entirely online over a period of four weeks.
- This course features several live interactive expert presentations each week with leading practitioners, software developers, academics, and donors.
- Every live event is recorded and archived for you to watch later.
- This course also features a unique hands-on learning environment with animated videos, technology demos, practical activities, networking events, office hours, participant presentations, immersive simulations, and more.
- TechChange recommends budgeting a minimum commitment of 5-7 hours per week and scheduling time for the course around your existing obligations.
- Participants will have access to all course content for at least 4 months after course completion so the material can be completed and revisited later.

Price

- **$395** if application and payment is submitted **September 19th, 2019**
- **$445** if application and payment is submitted **October 19th, 2019**
- **$495** if application and payment is submitted by course start date

Group discount rates available. For more details, please contact us at social [at] techchange.org. If you are not happy with your course experience for any reason, TechChange is happy to discuss refunds.

This course is a part of our Technology for Monitoring and Evaluation diploma program. Interested in learning about more courses? Browse through our diploma catalog here, or check out our main catalog and FAQ section!

Next Session

Nov 18, 2019 - Dec 13, 2019
Change

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Guest Experts

Samhir Vasdev

Digital Development Advisor at IREX

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Matt Berg

Matt Berg

CEO and CoFounder of Ona

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Amanda Makulec

Data Visualization Lead at Excella Consulting

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Leslie Sage

Director of Data Science at DevResults

Katherine Haugh

Monitoring, Evaluation, Research, and Learning Associate at Dexis Consulting Group

Nick Hamlin

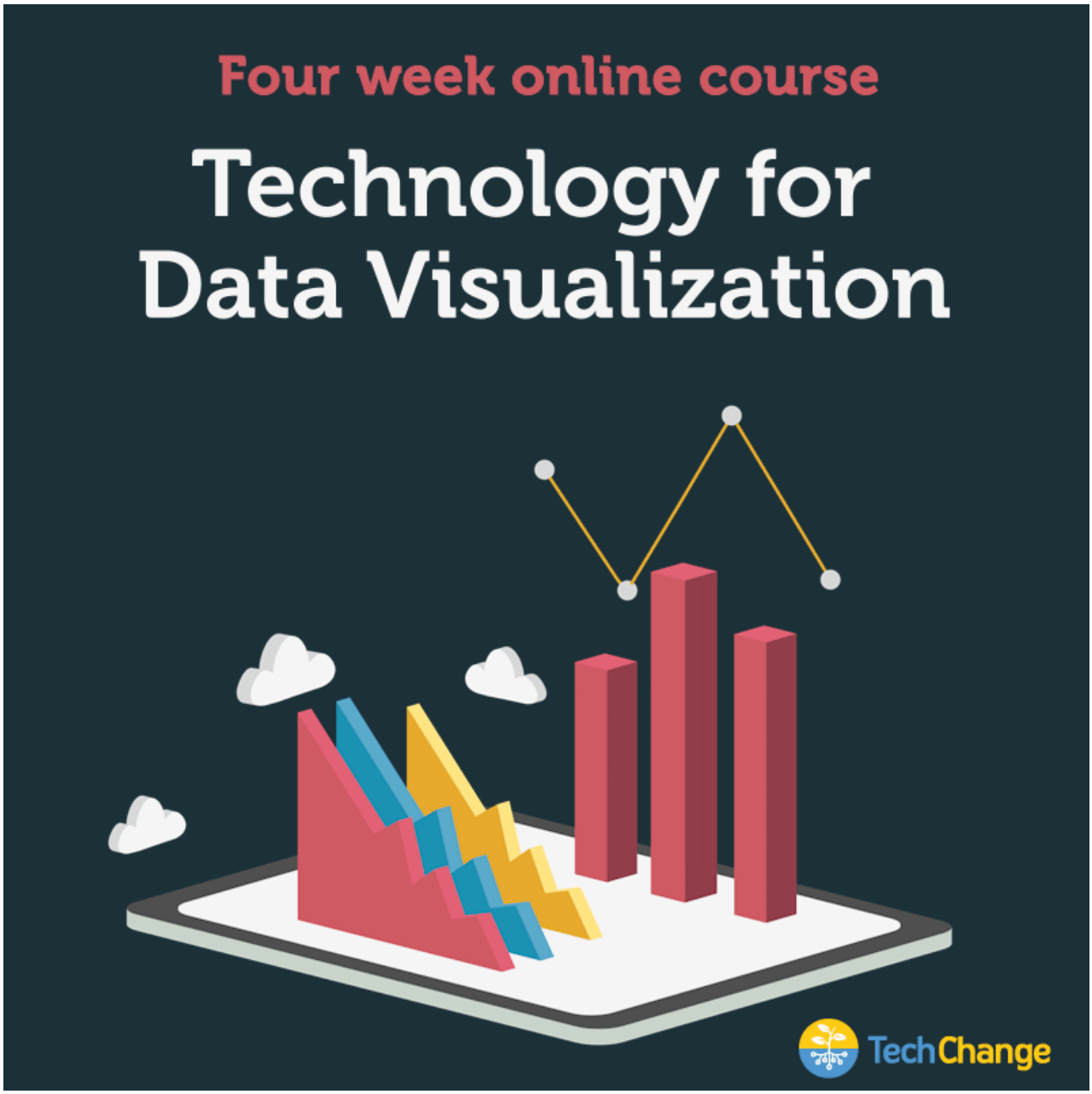
Data Scientist at Global Giving

Michelle Ayoub

Monitoring, Evaluation, and Learning Specialist at IRI

Matthew Baker

Monitoring, Evaluation, Research, and Learning (MERL) Specialist at USAID



Contact: techsupport [at] techchange.org