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# Conference schedule

March 5-8, 2020  
New Orleans Marriott  
[555 Canal Street, New Orleans, LA 70130](https://www.marriott.com/hotels-and-hotels/location/usa-la-new-orleans-555-canal-street)

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**Conference website:** Read our code of conduct, check out special events and more at [ire.org/nicar20](https://ire.org/nicar20).

**On Twitter:** [#NICAR20](https://twitter.com/NICAR20)

This schedule was updated on January 21, 2020, with 210 of 237 sessions confirmed, but it could change! For the most current information, download the Guidebook app ([guidebook.com](https://guidebook.com)) and search "2020 NICAR Conference."

You can also browse an interactive schedule online – or download a schedule in PDF, CSV or JSON formats – at this URL: [ire.org/nicar20-schedule](https://ire.org/nicar20-schedule).

# Thursday, March 5

Time	Session	Room
7:30 a.m. – 6 p.m.	Conference registration	Preservation Foyer, 2nd floor
7:30 a.m. – 6 p.m.	Conference sales	Preservation Foyer, 2nd floor
8:30 – 8:50 a.m.	Welcome first timers! How to make the most of NICAR20	Acadia, 3rd floor
9 a.m. – 12:30 p.m.	PyCAR (pre-registration required)	Studio 3, 2nd floor
9 a.m. – 12:30 p.m.	Upping your Excel game (pre-registration required)	Studio 2, 2nd floor
9 a.m. – 5:45 p.m.	Interviewing your data with SQL (pre-registration required)	Studio 4, 2nd floor
9 a.m. – 12:30 p.m.	Master class: Editing the data story	Galerie 5, 2nd floor
9 – 10 a.m.	Educators meetup	Galerie 4, 2nd floor
9 – 10 a.m.	Hello world! Choosing your data adventure	Acadia, 3rd floor
9 – 10 a.m.	Excel 1: Getting started with spreadsheets	Studio 8, 2nd floor
9 – 10 a.m.	Communicating statistical significance	Galerie 2, 2nd floor
9 – 10 a.m.	Regular expressions for the rest of us	Studio 10, 2nd floor
9 – 10 a.m.	Finding needles in haystacks with fuzzy matching	Studio 9, 2nd floor
9 – 10 a.m.	Introduction to VisiData	Studio 6, 2nd floor
9 – 10 a.m.	Tracking money spent on candidates up and down the ballot in 2020	Galerie 3, 2nd floor
9 – 10 a.m.	How the internet works (so you can scrape the web!)	Galerie 6, 2nd floor
9 – 10 a.m.	Finding the story: Census data	Studio 7, 2nd floor
9 – 10 a.m.	"Scrollytelling" with MapBox	Studio 1, 2nd floor
9 a.m. – 5 p.m.	Exhibitors and recruiters	Studio Foyers, 2nd floor
10:15 – 11:15 a.m.	Excel 2: Formulas & sorting	Studio 8, 2nd floor
10:15 – 11:15 a.m.	GitHub for journalists	Studio 1, 2nd floor
10:15 – 11:15 a.m.	Mining Data into TV Gold	Galerie 2, 2nd floor
10:15 – 11:15 a.m.	Finding the story: Using natural language processing in social media research	Studio 9, 2nd floor
10:15 – 11:15 a.m.	How to negotiate for data and records	Bissonet, 3rd floor
10:15 – 11:15 a.m.	How to make charts less bad	Galerie 6, 2nd floor
10:15 – 11:15 a.m.	My own worst enemy: Overcoming impostor syndrome	Galerie 4, 2nd floor
10:15 – 11:15 a.m.	Newsroom web scraping with JavaScript	Studio 6, 2nd floor
10:15 – 11:15 a.m.	Covering immigration with data	Acadia, 3rd floor
10:15 – 11:15 a.m.	Newsroom open-source tool showcase	Galerie 3, 2nd floor
11:30 a.m. – 12:30 p.m.	Investigating natural disasters: What to do before, during and after	Galerie 3, 2nd floor
11:30 a.m. – 12:30 p.m.	Data and docs for your arsenal	Bissonet, 3rd floor
11:30 a.m. – 12:30 p.m.	Excel 3: Filtering & pivot tables	Studio 8, 2nd floor
11:30 a.m. – 12:30 p.m.	Python: Let's scrape a website	Studio 9, 2nd floor
11:30 a.m. – 12:30 p.m.	Google Sheets: Scraping without coding	Studio 1, 2nd floor
11:30 a.m. – 12:30 p.m.	Reasoning for data visualization	Bissonet, 3rd floor
11:30 a.m. – 12:30 p.m.	Datasette	Studio 6, 2nd floor

Time	Session	Room
11:30 a.m. – 12:30 p.m.	Navigating NICAR as a TV journalist	Galerie 4, 2nd floor
11:30 a.m. – 12:30 p.m.	Making graphics with R	Studio 7, 2nd floor
2:15 – 5:45 p.m.	Intro to R (pre-registration required)	Studio 2, 2nd floor
2:15 – 5:45 p.m.	Introduction to web development (pre-registration required)	Studio 9, 2nd floor
2:15 – 5:45 p.m.	First Observable notebook: Prototyping with polish (pre-registration required)	Studio 3, 2nd floor
2:15 – 5:45 p.m.	Master class: Statistics for journalists	Galerie 5, 2nd floor
2:15 – 3:15 p.m.	Free and easy data viz	Galerie 2, 2nd floor
2:15 – 3:15 p.m.	Excel: Advanced pivot tables	Studio 8, 2nd floor
2:15 – 3:15 p.m.	R 1: Intro to R and RStudio	Studio 7, 2nd floor
2:15 – 3:15 p.m.	Python 1: The fundamentals	Studio 6, 2nd floor
2:15 – 3:15 p.m.	Finding the story: Using DNS search for investigative journalism	Studio 1, 2nd floor
2:15 – 3:15 p.m.	Campaign finance questions people ask ... plus yours!	Galerie 4, 2nd floor
2:15 – 3:15 p.m.	Year in CAR: Local innovation	Acadia, 3rd floor
2:15 – 3:15 p.m.	Finding and researching international connection	Galerie 6, 2nd floor
3:30 – 4:30 p.m.	R 2: Data analysis and plotting	Studio 7, 2nd floor
3:30 – 4:30 p.m.	Python 2: Intro to data analysis using Pandas	Studio 6, 2nd floor
3:30 – 4:30 p.m.	PDF 1: How to extract text and tables from PDFs like a boss	Studio 8, 2nd floor
3:30 – 4:30 p.m.	Uncloaked: Flight tracking for investigating people, planes and patterns	Galerie 2, 2nd floor
3:30 – 4:30 p.m.	Tracking dark money in the 2020 elections	Bissonet, 3rd floor
3:30 – 4:30 p.m.	Investigating bias: From housing to policing	Acadia, 3rd floor
3:30 – 4:30 p.m.	DataKit: Workflow automation for the newsroom and classroom	Galerie 3, 2nd floor
3:30 – 4:30 p.m.	A demo of the Big Local News platform	Galerie 4, 2nd floor
3:30 – 4:30 p.m.	International year in CAR	Galerie 6, 2nd floor
3:30 – 4:30 p.m.	"Scrollytelling" with Mapbox (repeat)	Studio 1, 2nd floor
4:45 – 5:45 p.m.	R 3: Gathering and cleaning data	Studio 7, 2nd floor
4:45 – 5:45 p.m.	Python 3: Data cleaning and visualization	Studio 6, 2nd floor
4:45 – 5:45 p.m.	Finding the story: Campaign finance	Studio 8, 2nd floor
4:45 – 5:45 p.m.	Countdown to the big count: Getting ready for Census 2020	Acadia, 3rd floor
4:45 – 5:45 p.m.	Encryption and journalism: From idea to publication	Galerie 3, 2nd floor
4:45 – 5:45 p.m.	Advanced data journalism through a browser	Galerie 6, 2nd floor
4:45 – 5:45 p.m.	Covering housing from A-Z: Localizing affordable housing stories and data	Galerie 2, 2nd floor
4:45 – 5:45 p.m.	DataKit install party	Galerie 4, 2nd floor
4:45 – 5:45 p.m.	Workbench	Studio 1, 2nd floor

## Friday, March 6

Time	Session	Room
7:30 – 8:45 a.m.	Mentor program breakfast	Carondelet, 3rd floor
8 a.m. – 5 p.m.	Conference registration	Preservation Foyer, 2nd floor

Time	Session	Room
8 a.m. – 5 p.m.	Conference sales	Preservation Foyer, 2nd floor
9 a.m. – 12:30 p.m.	PyCAR (pre-registration required)	Studio 3, 2nd floor
9 a.m. – 5:45 p.m.	First Python notebook: Data analysis on deadline (pre-registration required)	Studio 6, 2nd floor
9 a.m. – 12:30 p.m.	Digging into data for stories: A crash course in Excel - Group A (pre-registration required)	Studio 2, 2nd floor
9 a.m. – 12:30 p.m.	Digging into data for stories: A crash course in Excel - Group B (pre-registration required)	Studio 4, 2nd floor
9 a.m. – 12:30 p.m.	Master class: Election 2020 data	Galerie 5, 2nd floor
9 – 10 a.m.	Victims, villains and heroes: Turning data into characters	Galerie 3, 2nd floor
9 – 10 a.m.	Excel: Basic stats	Studio 8, 2nd floor
9 – 10 a.m.	JavaScript 1: Fundamentals and syntax	Studio 9, 2nd floor
9 – 10 a.m.	Finding the story: Business data	Studio 10, 2nd floor
9 – 10 a.m.	Navigating data.census.gov	Acadia, 3rd floor
9 – 10 a.m.	Getting started with Tableau Public	Studio 7, 2nd floor
9 – 10 a.m.	Encryption tools for journalists	Studio 1, 2nd floor
9 – 10 a.m.	Code buddies: Get help on your project	Galerie 4, 2nd floor
9 – 10 a.m.	Three free & powerful tools for analyzing document dumps	Galerie 6, 2nd floor
9 a.m. – 5 p.m.	Exhibitors and recruiters	Studio Foyers, 2nd floor
10:15 – 11:15 a.m.	Census: Numbers in the news	Acadia, 3rd floor
10:15 – 11:15 a.m.	JavaScript 2: Hello, D3!	Studio 9, 2nd floor
10:15 – 11:15 a.m.	Google Sheets: Custom formulas and automating tasks with the script editor	Studio 1, 2nd floor
10:15 – 11:15 a.m.	Advanced Tableau	Studio 7, 2nd floor
10:15 – 11:15 a.m.	Scraping in R	Studio 8, 2nd floor
10:15 – 11:15 a.m.	Data Blitz	Galerie 3, 2nd floor
10:15 – 11:15 a.m.	Beyond the horserace of election results graphics	Galerie 6, 2nd floor
10:15 – 11:15 a.m.	Build your own collaborative documentation site: An introduction to Library	Galerie 4, 2nd floor
10:15 – 11:15 a.m.	Interviewing your data	Bissonet, 3rd floor
10:15 – 11:15 a.m.	Finding the story: Data-driven disaster coverage	Studio 10, 2nd floor
11:30 a.m. – 12:30 p.m.	JavaScript 3: Making a map in D3	Studio 9, 2nd floor
11:30 a.m. – 12:30 p.m.	Hitchhikers guide to APIs	Studio 7, 2nd floor
11:30 a.m. – 12:30 p.m.	Finding the story: Using DNS search for investigative journalism (repeat)	Studio 1, 2nd floor
11:30 a.m. – 12:30 p.m.	Making interactive maps with R	Studio 8, 2nd floor
11:30 a.m. – 12:30 p.m.	Investigating sexual assault, for newsrooms big and small	Bissonet, 3rd floor
11:30 a.m. – 12:30 p.m.	Social media super sleuth	Acadia, 3rd floor
11:30 a.m. – 12:30 p.m.	FOIA from the flip side	Galerie 3, 2nd floor
11:30 a.m. – 12:30 p.m.	Excel tricks you've never used	Studio 10, 2nd floor
11:30 a.m. – 12:30 p.m.	Breaking through coding plateaus	Galerie 4, 2nd floor
11:30 a.m. – 12:30 p.m.	Mentoring for diversity and inclusion	Galerie 2, 2nd floor

Time	Session	Room
2:15 – 5:45 p.m.	ArcGIS: From spreadsheets to StoryMaps (pre-registration required)	Studio 7, 2nd floor
2:15 – 5:45 p.m.	Write better Python code (pre-registration required)	Studio 9, 2nd floor
2:15 – 5:45 p.m.	Master class: Writing the investigative narrative	Galerie 5, 2nd floor
2:15 – 3:15 p.m.	Career paths in data journalism	Bissonet, 3rd floor
2:15 – 3:15 p.m.	Excel 1: Getting started with spreadsheets (repeat)	Studio 8, 2nd floor
2:15 – 3:15 p.m.	SQL 1: Exploring data	Studio 10, 2nd floor
2:15 – 3:15 p.m.	Stats 1: An introduction	Studio 4, 2nd floor
2:15 – 3:15 p.m.	Google Sheets: Scraping without coding (repeat)	Studio 1, 2nd floor
2:15 – 3:15 p.m.	Finding the story: Census data (repeat)	Studio 2, 2nd floor
2:15 – 3:15 p.m.	An automated election twitterbot using R and Python	Studio 3, 2nd floor
2:15 – 3:15 p.m.	Quick-turn data stories	Acadia, 3rd floor
2:15 – 3:15 p.m.	Avant garde data viz	Galerie 6, 2nd floor
2:15 – 3:15 p.m.	Covering disparities in education with data	Galerie 2, 2nd floor
2:15 – 3:15 p.m.	Negotiating for data at scale	Galerie 3, 2nd floor
3:30 – 4:30 p.m.	Finding hidden stories in hidden communities	Bissonet, 3rd floor
3:30 – 4:30 p.m.	Excel 2: Formulas & sorting (repeat)	Studio 8, 2nd floor
3:30 – 4:30 p.m.	SQL 2: Grouping and summing data	Studio 10, 2nd floor
3:30 – 4:30 p.m.	Stats 2: Linear regression	Studio 4, 2nd floor
3:30 – 4:30 p.m.	PDF 2: Using OCR to extract data from PDFs	Studio 3, 2nd floor
3:30 – 4:30 p.m.	Power BI 1: Create interactive data visualizations	Studio 2, 2nd floor
3:30 – 4:30 p.m.	Data visualization & storytelling with Flourish	Studio 1, 2nd floor
3:30 – 4:30 p.m.	Being a better ally	Galerie 4, 2nd floor
3:30 – 4:30 p.m.	Day-turn investigations	Galerie 6, 2nd floor
3:30 – 4:30 p.m.	Machine learning for the rest of us	Galerie 3, 2nd floor
3:30 – 4:30 p.m.	Beyond pictures: Turning satellite imagery into data	Galerie 2, 2nd floor
4:45 – 5:45 p.m.	Excel 3: Filtering & pivot tables (repeat)	Studio 8, 2nd floor
4:45 – 5:45 p.m.	SQL 3: Joining tables	Studio 10, 2nd floor
4:45 – 5:45 p.m.	Stats 3: Logistic regression	Studio 4, 2nd floor
4:45 – 5:45 p.m.	PDF 3: Batch pdf processing	Studio 3, 2nd floor
4:45 – 5:45 p.m.	Geocoding using online tools	Studio 1, 2nd floor
4:45 – 5:45 p.m.	Power BI 2: Clean, join and visualize data	Studio 2, 2nd floor
5 – 6:15 p.m.	Lightning Talks	Acadia, 3rd floor

## Saturday, March 7

Time	Session	Room
8:30 a.m. – 6 p.m.	Conference registration	Preservation Foyer, 2nd floor
8:30 a.m. – 6 p.m.	Conference sales	Preservation Foyer, 2nd floor

Time	Session	Room
9 a.m. – 12:30 p.m.	Mastering Google Sheets: Web scraping, running scripts and other tricks (pre-registration required)	Studio 1, 2nd floor
9 a.m. – 12:30 p.m.	Digging into data for stories: A crash course in Excel - Group A (pre-registration required)	Studio 2, 2nd floor
9 a.m. – 12:30 p.m.	Digging into data for stories: A crash course in Excel - Group B (pre-registration required)	Studio 4, 2nd floor
9 a.m. – 5:45 p.m.	Exploring the tidyverse in R (pre-registration required)	Studio 7, 2nd floor
9 a.m. – 5:45 p.m.	First graphics app: Node.js in the newsroom (pre-registration required)	Studio 3, 2nd floor
9 a.m. – 12:30 p.m.	Web scraping with Python (pre-registration required)	Studio 9, 2nd floor
9 a.m. – 12:30 p.m.	Master class: Finding and telling stories with earth imagery	Galerie 5, 2nd floor
9 – 10 a.m.	Advanced SQL: Update queries, sub-queries and more	Studio 10, 2nd floor
9 – 10 a.m.	Command line for reporters (Mac)	Studio 6, 2nd floor
9 – 10 a.m.	Enriched census data from IPUMS	Galerie 6, 2nd floor
9 – 10 a.m.	Mobile, data and desktop reporting tools for your newsroom	Acadia, 3rd floor
9 – 10 a.m.	QGIS 1: Mapmaking for beginners	Studio 8, 2nd floor
9 – 10 a.m.	How I learn to tell stories with data	Galerie 4, 2nd floor
9 – 10 a.m.	Covering climate change: Beyond models and speculation	Galerie 3, 2nd floor
9 a.m. – 5 p.m.	Exhibitors and recruiters	Studio Foyers, 2nd floor
10:15 – 11:15 a.m.	Finding & using international data	Galerie 6, 2nd floor
10:15 – 11:15 a.m.	MySQL	Studio 10, 2nd floor
10:15 – 11:15 a.m.	Voter file data, from topline to deep dives to breaches	Bissonet, 3rd floor
10:15 – 11:15 a.m.	Exploring networks with graph databases	Studio 6, 2nd floor
10:15 – 11:15 a.m.	Dear diary: Best practices for keeping a data diary	Galerie 3, 2nd floor
10:15 – 11:15 a.m.	QGIS 2: Analyzing geographic data	Studio 8, 2nd floor
10:15 – 11:15 a.m.	Burner profiles: How to safely create social media profiles for your investigations	Acadia, 3rd floor
10:15 – 11:15 a.m.	Unpacking AI's influence in your community	Galerie 2, 2nd floor
10:15 – 11:15 a.m.	Introducing and implementing security protocols in your newsroom	Galerie 4, 2nd floor
11:30 a.m. – 12:30 p.m.	Building and telling a bulletproof data story	Galerie 3, 2nd floor
11:30 a.m. – 12:30 p.m.	Text mining in R with tidytext	Studio 6, 2nd floor
11:30 a.m. – 12:30 p.m.	Beyond formulas: A statistical world view	Galerie 6, 2nd floor
11:30 a.m. – 12:30 p.m.	Making graphics with R (repeat)	Studio 8, 2nd floor
11:30 a.m. – 12:30 p.m.	Art of the interview	Galerie 2, 2nd floor
11:30 a.m. – 12:30 p.m.	Finding data for local investigations	Acadia, 3rd floor
11:30 a.m. – 12:30 p.m.	Master your data with Power Query for Excel and Power BI	Studio 10, 2nd floor
11:30 a.m. – 12:30 p.m.	Public Accountability project	Galerie 4, 2nd floor
2:15 – 5:45 p.m.	Interactive data viz with D3 (pre-registration required)	Studio 9, 2nd floor
2:15 – 5:45 p.m.	Master class: Interviewing	Galerie 5, 2nd floor
2:15 – 3:15 p.m.	Research gumbo: Redux	Galerie 6, 2nd floor
2:15 – 3:15 p.m.	Excel: Importing data	Studio 8, 2nd floor

Time	Session	Room
2:15 – 3:15 p.m.	SQL 1: Exploring data (repeat)	Studio 10, 2nd floor
2:15 – 3:15 p.m.	R 1: Intro to R and RStudio (repeat)	Studio 2, 2nd floor
2:15 – 5:45 p.m.	Practical machine learning for investigations with fast.ai (pre-registration required)	Studio 1, 2nd floor
2:15 – 3:15 p.m.	Using csvkit to wrangle data without Excel	Studio 6, 2nd floor
2:15 – 3:15 p.m.	Tracking 2020 digital ads: Learn the secrets of new political ad databases	Galerie 2, 2nd floor
2:15 – 3:15 p.m.	The life of a data story: Going from data to narrative	Acadia, 3rd floor
2:15 – 3:15 p.m.	Being scrappy: Doing data journalism as a team of one	Galerie 4, 2nd floor
2:15 – 3:15 p.m.	Inside police databases	Bissonet, 3rd floor
2:15 – 3:15 p.m.	Finding the story in property records	Studio 4, 2nd floor
3:30 – 4:30 p.m.	Excel CARwash: Cleaning dirty data	Studio 8, 2nd floor
3:30 – 4:30 p.m.	SQL 2: Grouping and summing data (repeat)	Studio 10, 2nd floor
3:30 – 4:30 p.m.	R 2: Data analysis and plotting (repeat)	Studio 2, 2nd floor
3:30 – 4:30 p.m.	How to build a live data-driven application that never crashes	Studio 6, 2nd floor
3:30 – 4:30 p.m.	How to make data findings come to life on radio	Galerie 6, 2nd floor
3:30 – 4:30 p.m.	Leading the data team	Galerie 2, 2nd floor
3:30 – 4:30 p.m.	Turning courts docs into data	Acadia, 3rd floor
3:30 – 4:30 p.m.	Census Reporting 2.0	Galerie 4, 2nd floor
3:30 – 4:30 p.m.	Finding the story: Campaign finance (repeat)	Studio 4, 2nd floor
4:45 – 5:45 p.m.	Excel: Using string functions to manipulate data	Studio 8, 2nd floor
4:45 – 5:45 p.m.	SQL 3: Joining tables (repeat)	Studio 10, 2nd floor
4:45 – 5:45 p.m.	R 3: Gathering and cleaning data (repeat)	Studio 2, 2nd floor
4:45 – 5:45 p.m.	Bringing data journalism to your student newsroom	Galerie 4, 2nd floor
4:45 – 5:45 p.m.	Using IRS nonprofit data and decoding 990s	Bissonet, 3rd floor
4:45 – 5:45 p.m.	Collaborate tool	Galerie 2, 2nd floor
4:45 – 5:45 p.m.	Geocoding using programming	Studio 6, 2nd floor

## Sunday, March 8

Time	Session	Room
9 – 10 a.m.	JavaScript 2: Hello D3! (repeat)	Studio 3, 2nd floor
9 – 10 a.m.	Stats 1: An introduction (repeat)	Studio 2, 2nd floor
9 – 10 a.m.	Python 1: The fundamentals (repeat)	Studio 6, 2nd floor
9 – 10 a.m.	PDF 1: Using free online tools (repeat)	Studio 7, 2nd floor
9 – 10 a.m.	Finding the story: Opioid data	Studio 4, 2nd floor
9 – 10 a.m.	TL;DR: What to remember when you forget everything else	Galerie 2, 2nd floor
9 a.m. – 12:30 p.m.	2020 Election hackathon	Galerie 4, 2nd floor
9 a.m. – 12:30 p.m.	Master class: Getting ready to cover Census 2020	Galerie 5, 2nd floor
9 – 10 a.m.	Finding the story: Using natural language processing in social media research (repeat)	Studio 9, 2nd floor

Time	Session	Room
9 – 10:30 a.m.	Conference sales	Preservation Foyer, 2nd floor
10:15 – 11:15 a.m.	JavaScript 3: Making a map in D3 (repeat)	Studio 3, 2nd floor
10:15 – 11:15 a.m.	Stats 2: Linear regression (repeat)	Studio 2, 2nd floor
10:15 – 11:15 a.m.	Python 2: Intro to data analysis using Pandas (repeat)	Studio 6, 2nd floor
10:15 – 11:15 a.m.	Python: Let's scrape a website (repeat)	Studio 9, 2nd floor
10:15 a.m. – 12:30 p.m.	Building your own database workshop	Galerie 6, 2nd floor
10:15 – 11:15 a.m.	Where'd I put that file?	Galerie 2, 2nd floor
10:15 – 11:15 a.m.	PDF 2: Using OCR to extract data from PDFs (repeat)	Studio 7, 2nd floor
10:15 – 11:15 a.m.	Advanced SQL: Update queries, sub-queries and more (repeat)	Studio 4, 2nd floor
11:30 a.m. – 12:30 p.m.	SQL CARwash: Cleaning dirty data	Studio 4, 2nd floor
11:30 a.m. – 12:30 p.m.	Python 3: Data cleaning and visualization (repeat)	Studio 6, 2nd floor
11:30 a.m. – 12:30 p.m.	GitHub for journalists (repeat)	Studio 3, 2nd floor
11:30 a.m. – 12:30 p.m.	Stats 3: Logistic regression (repeat)	Studio 2, 2nd floor
11:30 a.m. – 12:30 p.m.	PDF 3: Batch pdf processing (repeat)	Studio 7, 2nd floor
11:30 a.m. – 12:30 p.m.	Mapping in Python	Studio 9, 2nd floor