



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)

Conference website: Read our code of conduct, check out special events and more at ire.org/nicar20.

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

This schedule was updated on January 22, 2020, with 210 of 237 sessions confirmed, but it could change! For the most current information, download the Guidebook app (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.

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
7:30 – 8:15 a.m.	International meet and greet	Carondelet, 3rd 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.	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
12:45 – 2 p.m.	Journalists of color in the newsroom meetup	Carondelet, 3rd 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.	Mentoring for diversity and inclusion	Bissonet, 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
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

Time	Session	Room
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
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

Time	Session	Room
8:30 a.m. – 6 p.m.	Conference sales	Preservation Foyer, 2nd floor
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.	Reasoning for data visualization	Bissonet, 3rd 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

Time	Session	Room
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
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 dashboards	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

Time	Session	Room
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
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.	Turning your stack of documents into structured data	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