

q1

adam okulicz-kozaryn

adam.okulicz.kozaryn@gmail.com

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outline

VisionZ; probably most useful; watch them

◇ the whole thing [https://www.youtube.com/watch?v=](https://www.youtube.com/watch?v=KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4)

[KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4](https://www.youtube.com/watch?v=KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4)

◇ 01 - open and view data

<https://www.youtube.com/watch?v=KjvFil3o4y8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4&index=1>

◇ 04 - Working with attributes

<https://www.youtube.com/watch?v=G6UeiGg2Cp8&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4&index=4>

◇ 07 - Basic vector styling

<https://www.youtube.com/watch?v=b-0MQ7dnVJk&index=7&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4>

◇ 03 - print composer

<https://www.youtube.com/watch?v=YnqbC1hkfnk&list=PLNCPalajQvg7wQvzf3fM8f0Z5lMKl86Q4&index=3>

other references

- ◇ http://www.youtube.com/results?search_query=qgis
not sure, any of these useful in particular? email listserv
- ◇ pretty good and comprehensive
<http://www.qgistutorials.com/en/>
- ◇ http://www.qgistutorials.com/en/docs/teach_qgis.html
- ◇ Good howto, references
 - <http://hub.qgis.org/projects/quantum-gis/wiki/>
 - http://hub.qgis.org/projects/quantum-gis/wiki/How_do_I_do_that_in_QGIS
- ◇ other (rather lengthy and dry):
 - https://docs.qgis.org/2.8/en/docs/gentle_gis_introduction/
 - https://docs.qgis.org/2.14/en/docs/training_manual/

a tip of the week...

- ◇ get yourself a hi-res screen (if you don't have one yet)
- ◇ it immensely helps working with any research, especially gis
- ◇ it's just 150\$ or so
- ◇ 2560 x 1080 or larger would do, say <https://www.newegg.com/Product/Product.aspx?Item=N82E16824025340>
- ◇ what matters is # of pixels not so much size of the screen!

gui

- ◇ pretty standard gui
- ◇ first thing is to add data...
- ◇ say US states; where do i get it?
- ◇ google “US states shapefile” and we get
- ◇ `https://www.census.gov/geo/maps-data/data/tiger-cart-boundary.html`
- ◇ click 'State,' and get
- ◇ `https://www.census.gov/geo/maps-data/data/cbf/cbf_state.html`
- ◇ and download say 'cb_2014_us_state_20m.zip'
- reliable; important: always ask yourself how reliable is the source
- ◇ in general, trust the government, “major companies”,

adding data

- ◇ click first icon on the left toolbar “line with nodes” for vector data
- ◇ “checkboard” is for raster/pictures (seldom used)
- ◇ and we got US in the middle: the map
 - grab it and move around with “hand” pointer
- ◇ and a layer on the left—you can uncheck it
 - and right click to pop up more information

zooming, identifying

- ◇ can zoom in and out
 - either click the map with appropriate tool
 - better yet, draw a rectangle to achieve appropriate zoom
- ◇ once zoomed in, let's identify features
 - select tool “arrow with ‘i’” - ‘i’ for info/identify
 - click on some polygon, say TX and it'll pop up information
- ◇ a useful thing is to right click on layer and do “zoom to layer”

underlying data

- ◇ there is always a table (database) underlying a map
- ◇ right-click on the layer, and open “open attribute table”
- ◇ now, let's make a selection
 - and you can highlight some rows in the table
 - or do it in the map: “arrow with rectangle”
 - either click or draw a rectangle
 - to deselect use “arrow with 'no' sign”

loading data

- ◇ and let's get some more data and load it into qgis

`https://docs.google.com/uc?id=`

`1xJDhcRCkgv7k4tNCa720og5bohV6dTB2&export=download`

play around

- ◇ add more layers, move them up and down
- ◇ turn on the layers and off (check tick)
- ◇ right click and see the data (table)
- remember i was saying there is always data under the map?

your first thematic map

- ◇ thematic maps are the key thing in this class: thematic.pdf
- ◇ nj_counties-Properties-Style and from drop-down:
 “Graduated”
- ◇ Column: “POP2010”
- ◇ Color ramp: can just leave Blues
- ◇ and hit “Classify” button
- ◇ many ways to do the classification: more soon
 - if you’re curious—just poke around with classifications
 - easy to experiment and figure things out there
- ◇ and hit “OK” to see the map—viola!

print a map: Print Composer

- ◇ Project-New Print Composer
- ◇ NJ is tall: on the right “Composition” and do “portrait”
- ◇ left: blank icon “Add New Map” and draw a rectangle
- ◇ left: icon with arrows “Move Item Content” to adjust view
- ◇ right: “Item properties” change scale to adjust zoom
- ◇ left: legend button “Add new legend”
 - normally legend requires lots of editing
 - right: **uncheck** auto-update and beautify it:
 - drop items with minus sign
 - and edit by double clicking it
- ◇ top: on the left: Composer-Export as Image
 - probably jpg is fine, just increase resolution to say 600dpi
 - http://www.qgistutorials.com/en/docs/making_a_map.html and