



University of Illinois Faculty's Salary Survey

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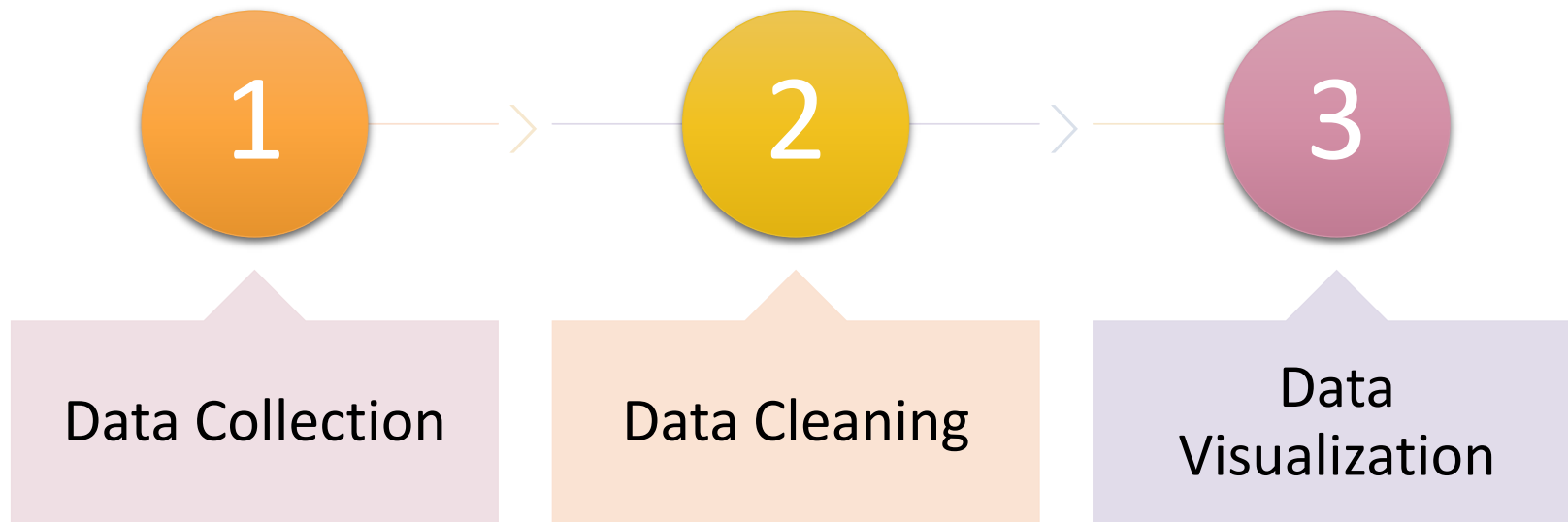
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<http://uiuc-salary-viz.herokuapp.com/>

Project Description

- Aim: Assist postgraduate students seeking jobs and faculty members looking for mobility to understand the salary variation in different universities
- Method: Provide an overview of salary variation across the campuses in the University of Illinois (UI) system by data visualization
- Data: Salary of faculty members in 2013/14 – 2017/18
- Three campuses in UI system:
 - Chicago
 - Springfield
 - Urbana-Champaign

Procedure



Data collection:

- From UI Gray Book
(The Board of
Trustees Office)

Time span of data:

- 2013/14 – 2017/18

- College
- Campus
- Department
- Employee
- Job Title
- Tenure
- Employment Class
- Salary

Data Cleaning

Data retrieved include:

- Academic positions
- Administrative staffs

→ Data cleaned for studying the salary distribution of academic staffs only

1	College	Campus	Departme	Employee	JobTitle	Tenure	Salary2013	Salary2014
2	Agr, Conso	Urbana-Ch	ADM Insti	Kumar, De	POSTDOC RES ASSOC	No Info	NULL	NULL
3	Agr, Conso	Urbana-Ch	Agr & Con	Allen-Smit	ASSOC PROF	Indefinite	91479	NULL
4	Agr, Conso	Urbana-Ch	Agr & Con	Ando, Am	PROF	Indefinite	98403	112355
5	Agr, Conso	Urbana-Ch	Agr & Con	Arends-K	ASSOC PROF	Indefinite	90842.16	93059.16
6	Agr, Conso	Urbana-Ch	Agr & Con	Baylis, Ka	ASSOC PROF	Indefinite	98025	101211
7	Agr, Conso	Urbana-Ch	Agr & Con	Brozovic, M	ASSOC PROF	Indefinite	92163.12	NULL
8	Agr, Conso	Urbana-Ch	Agr & Con	Bullock, D	PROF	Indefinite	110025.1	115611.1
9	Agr, Conso	Urbana-Ch	Agr & Con	Christense	ASST PROF	Probation	NULL	NULL
10	Agr, Conso	Urbana-Ch	Agr & Con	Crost, Ben	ASST PROF	Probation	NULL	112000
11	Agr, Conso	Urbana-Ch	Agr & Con	Dall'Erba	ASSOC PROF	Indefinite	NULL	NULL
12	Agr, Conso	Urbana-Ch	Agr & Con	Ellinger, R	PROF	Indefinite	138234	143470
13	Agr, Conso	Urbana-Ch	Agr & Con	Ellison, Br	ASST PROF	Probation	82000	84665
14	Agr, Conso	Urbana-Ch	Agr & Con	Endres, A	PROF	Indefinite	96750	102703
15	Agr, Conso	Urbana-Ch	Agr & Con	Fox, John	PROF	Indefinite	NULL	NULL
16	Agr, Conso	Urbana-Ch	Agr & Con	Garcia, Ph	PROF	Indefinite	133145	137797
17	Agr, Conso	Urbana-Ch	Agr & Con	Goldsmith	PROF	Indefinite	96171.08	100816.1
18	Agr, Conso	Urbana-Ch	Agr & Con	Gramig, B	ASSOC PROF	Indefinite	NULL	NULL
19	Agr, Conso	Urbana-Ch	Agr & Con	Gunderse	PROF	Indefinite	132800	142846
20	Agr, Conso	Urbana-Ch	Agr & Con	Hornbake	ASSOC PROF	Indefinite	74683.08	NULL

Data Analysis

- Python

Visualization

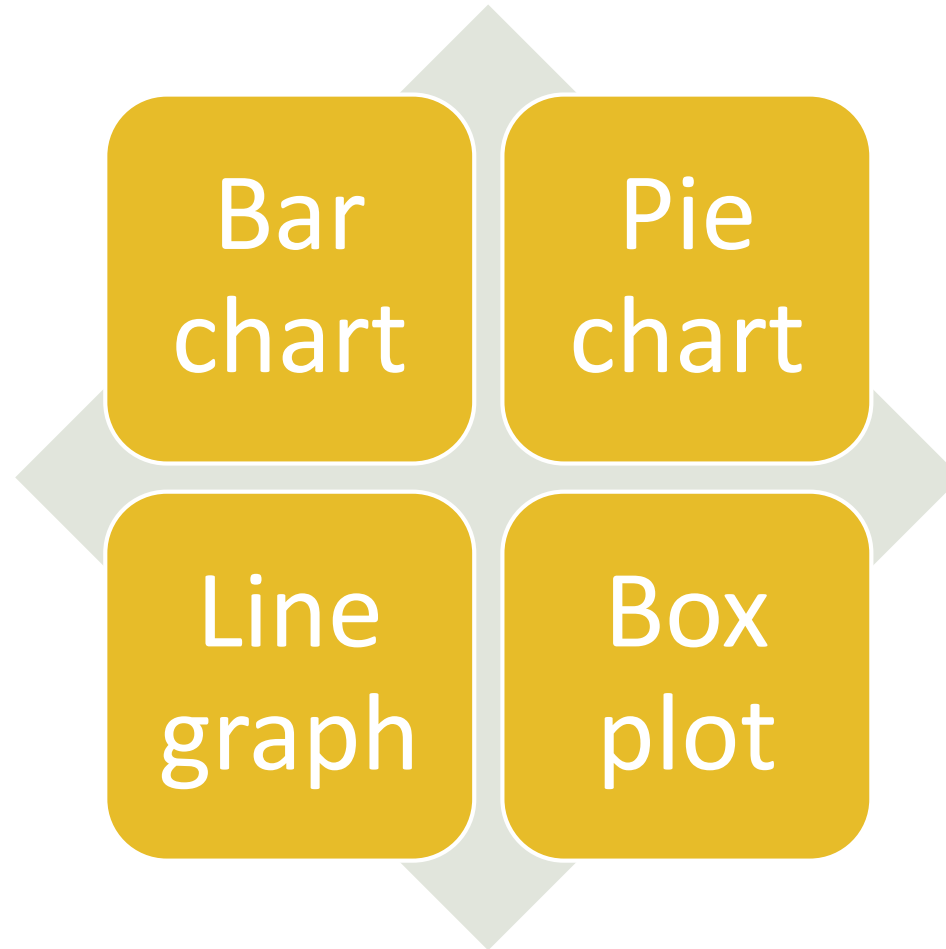
- Plotly

Web Page

- Dash
- Heroku

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Data Visualization



Outcome



Faculty's Salary Range Distribution (By Department)



Faculty's Salary Distribution over 5 Years (By Department)



Comparison of Faculty's Salary Range (By Department)



Population of Faculty and Comparison of the Median Salary (By a Common Department across Campuses)



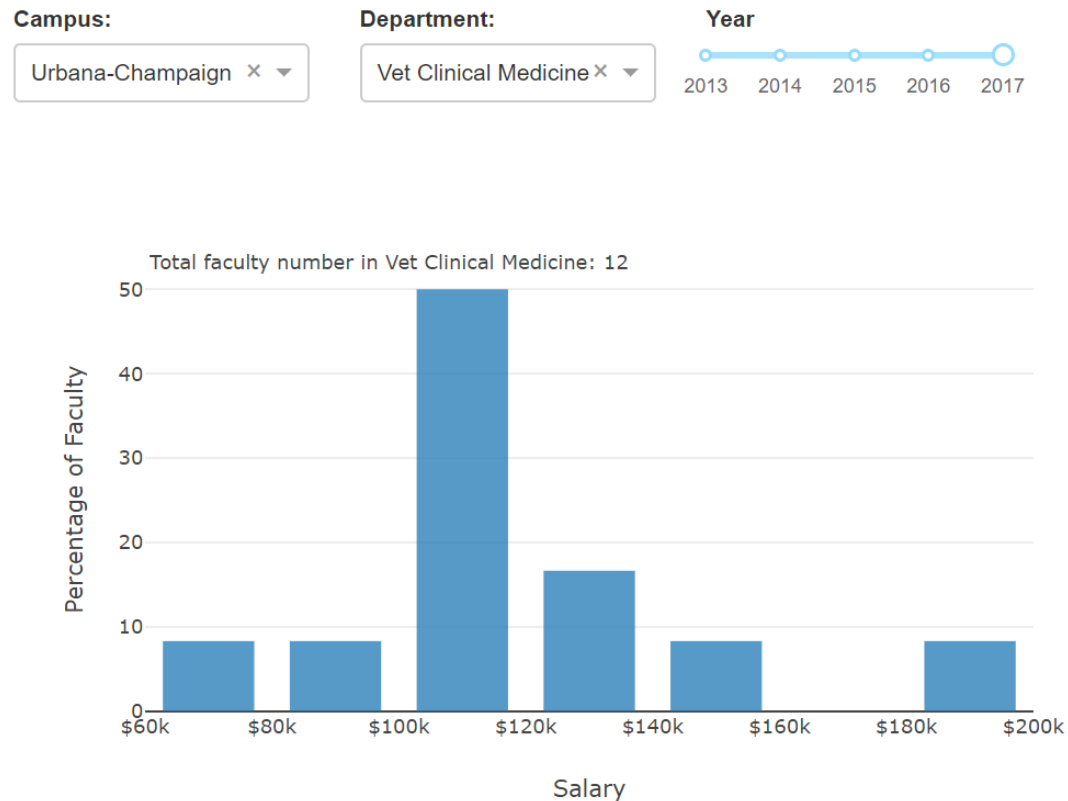
Departments with Top Ten Median Salary (By Campus)



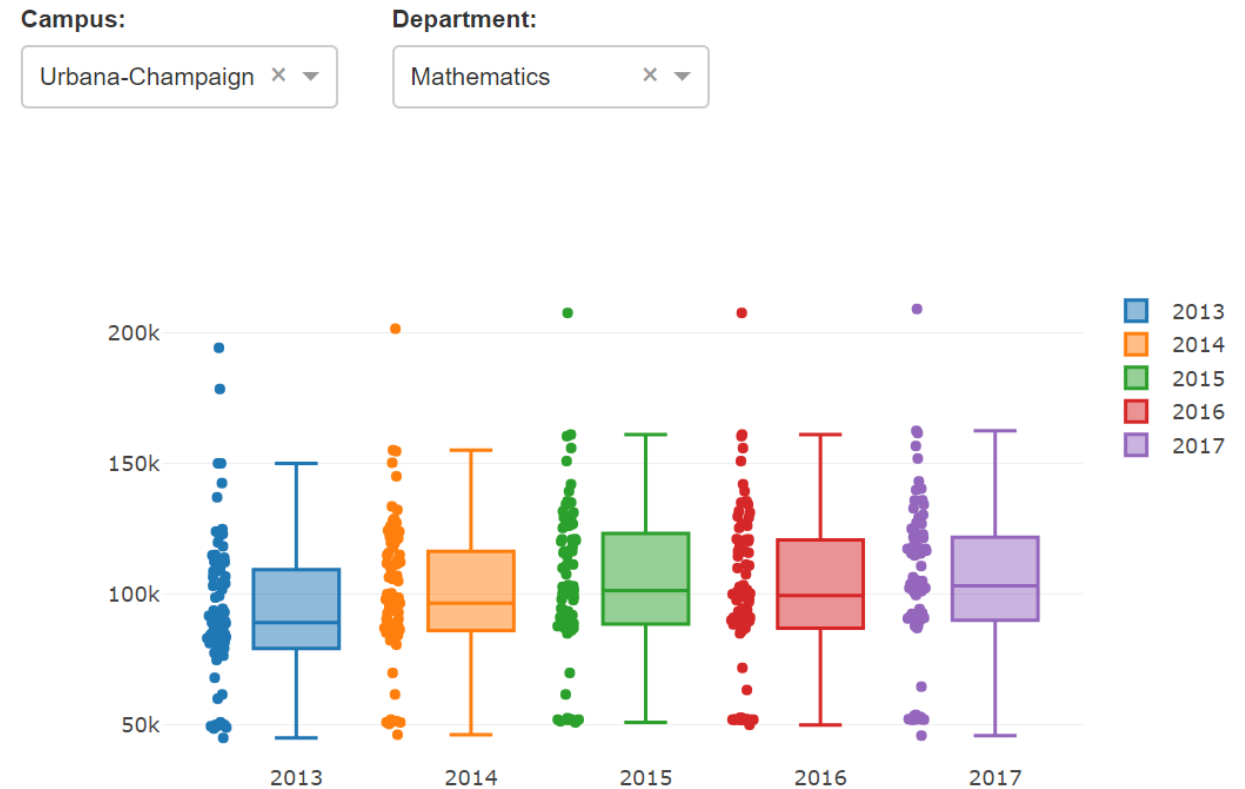
Departments with Top Ten Median Salary (By Position)

Sample Graphs

Faculty's Salary Range by Department



Salary of Faculty Over 5 years



Challenges



Not easy to collect a set of data which is substantial but workable in three weeks

Visualization skills

Time limitation

Future Plan



Improving the visualization

Data analysis

Extend the data to other universities in Illinois and in the States