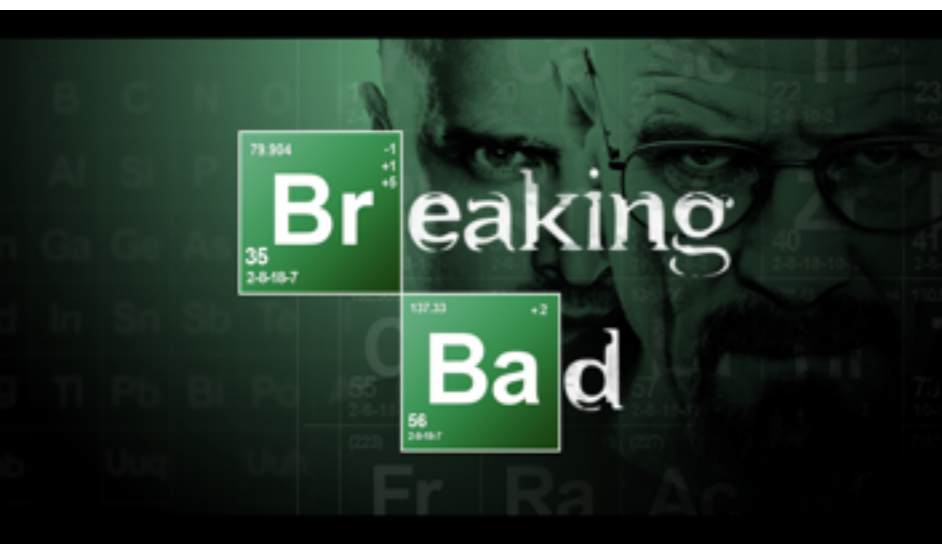


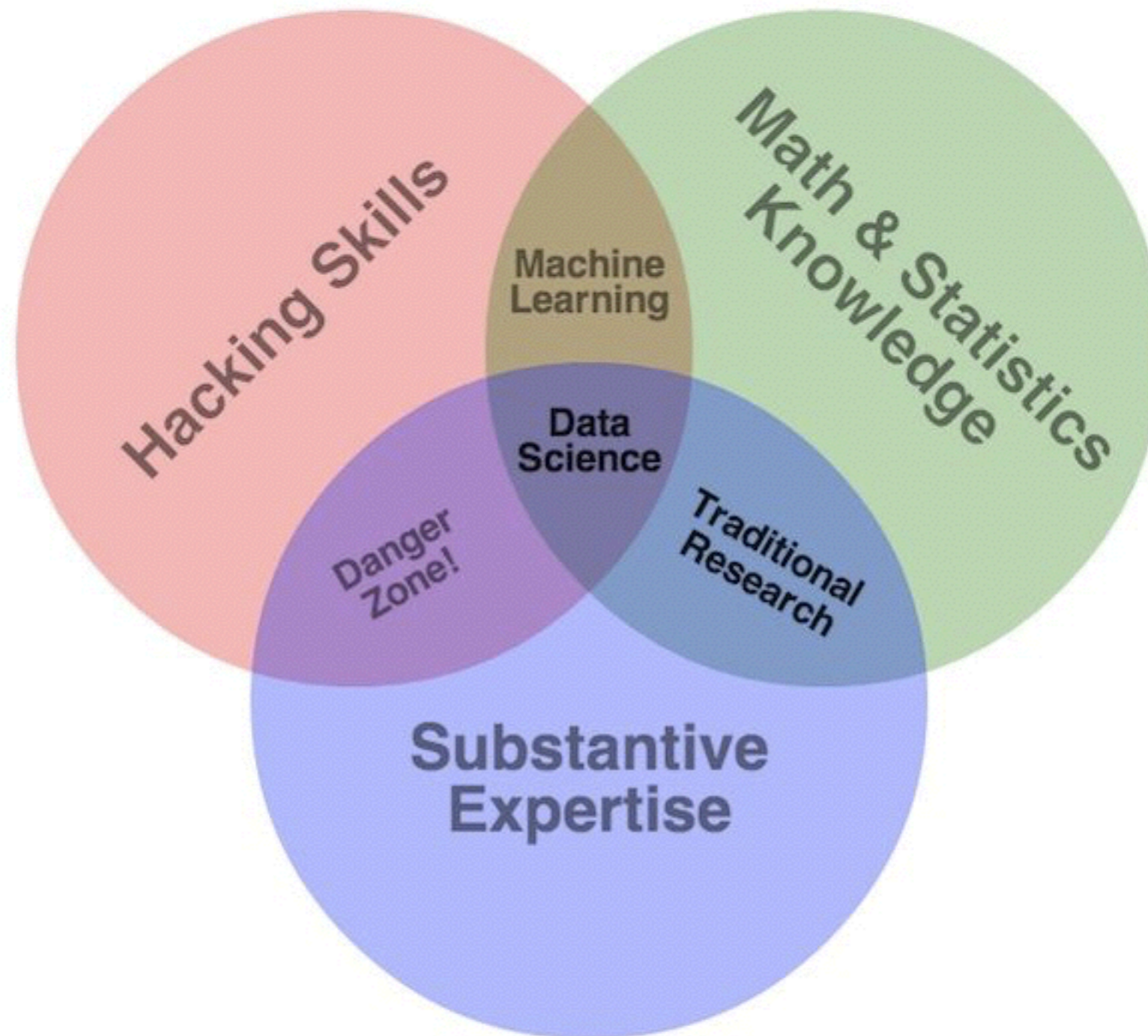
Breaking Data Science



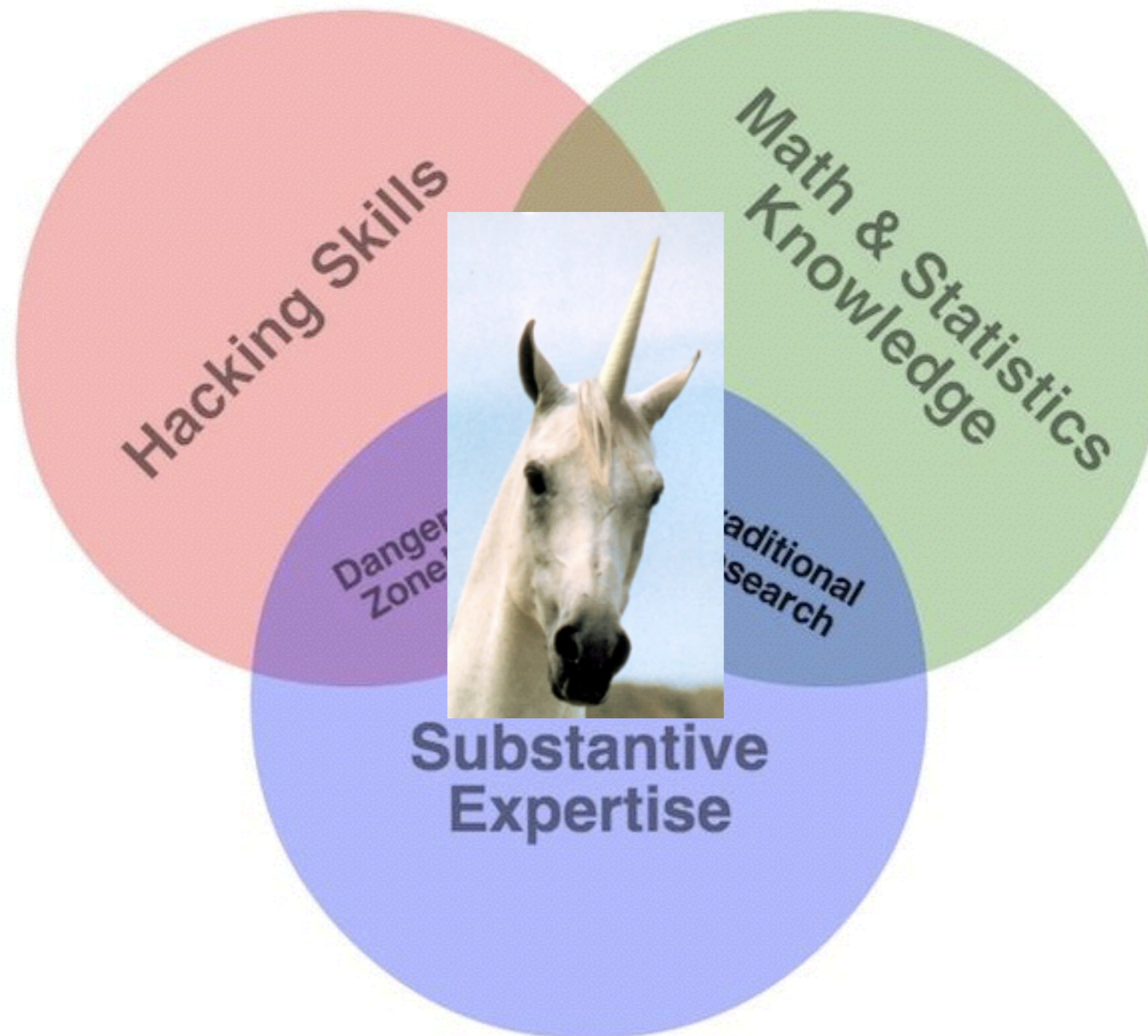
Robert J. Brunner



What is Data Science?



What is Data Science?



What is Data Science?

Data science

From Wikipedia, the free encyclopedia

Data Science is an interdisciplinary field about processes and systems to extract **knowledge** or insights from large volumes of **data** in various forms, either structured or unstructured,^{[1][2]} which is a continuation of some of the data analysis fields such as **statistics**, **data mining** and **predictive analytics**, as well as **Knowledge Discovery in Databases (KDD)**.

What is Data Science?

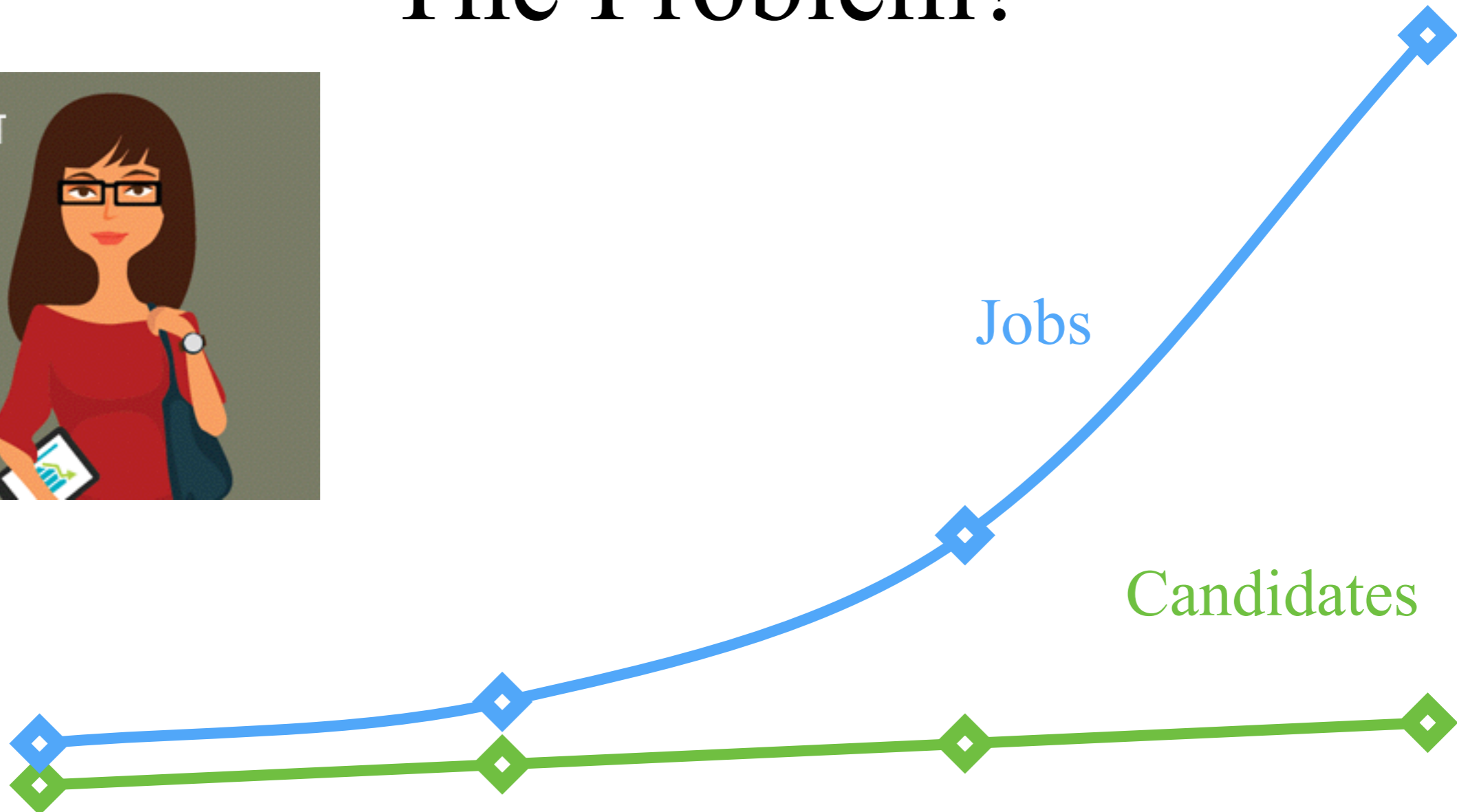
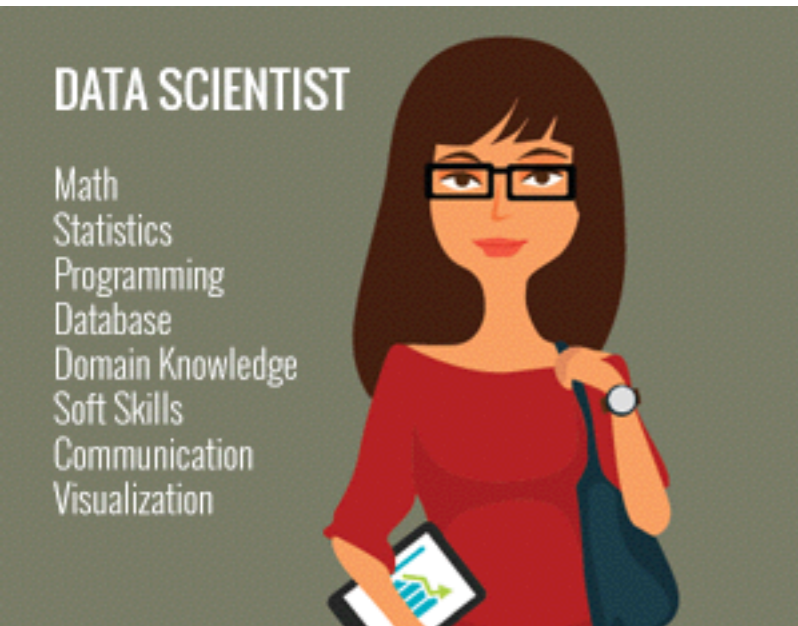
The Science of *Dealing with Data*,
once it has been established.

Nauer, Peter (1974) Concise
Survey of Computer Methods



Astronomy Ph.D
Turing Award

The Problem?



Looks like the *University of Illinois!*



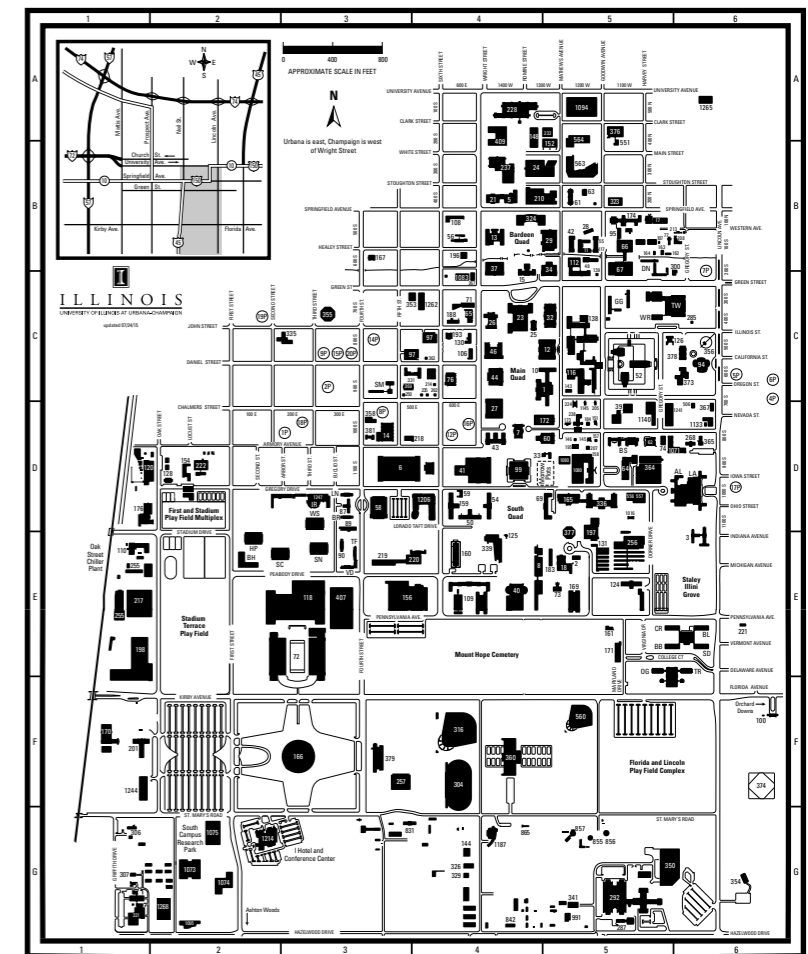
Data Science: The Topics?

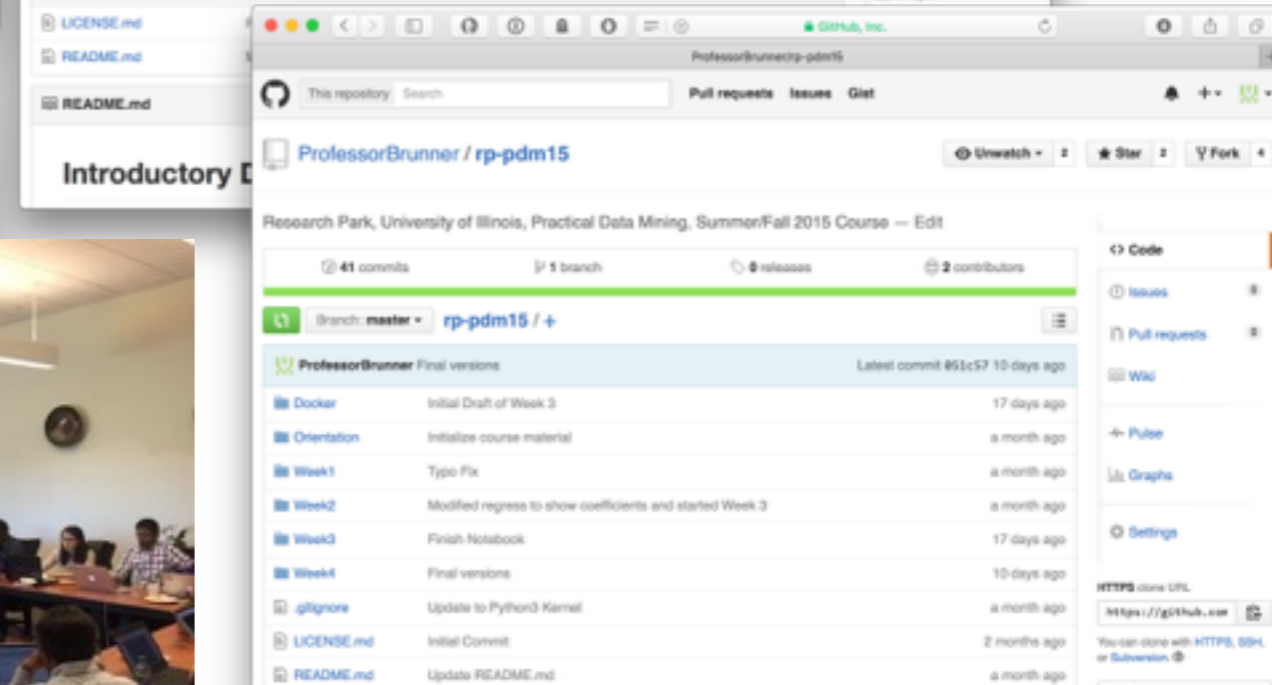
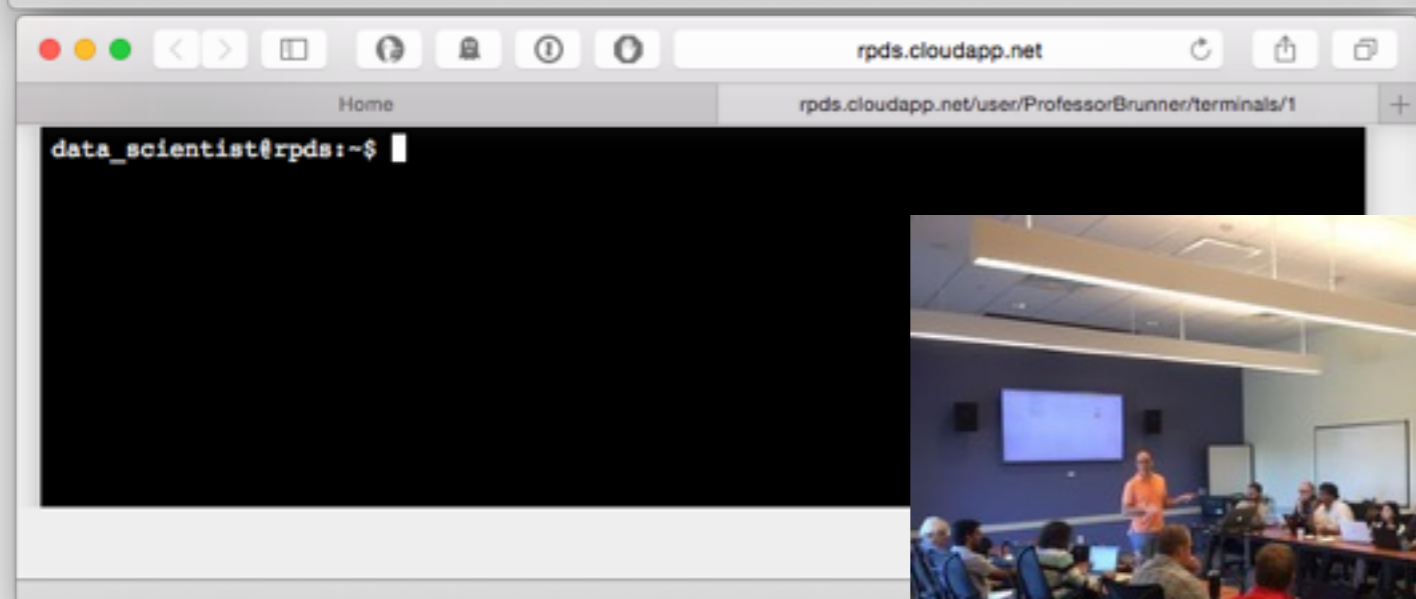
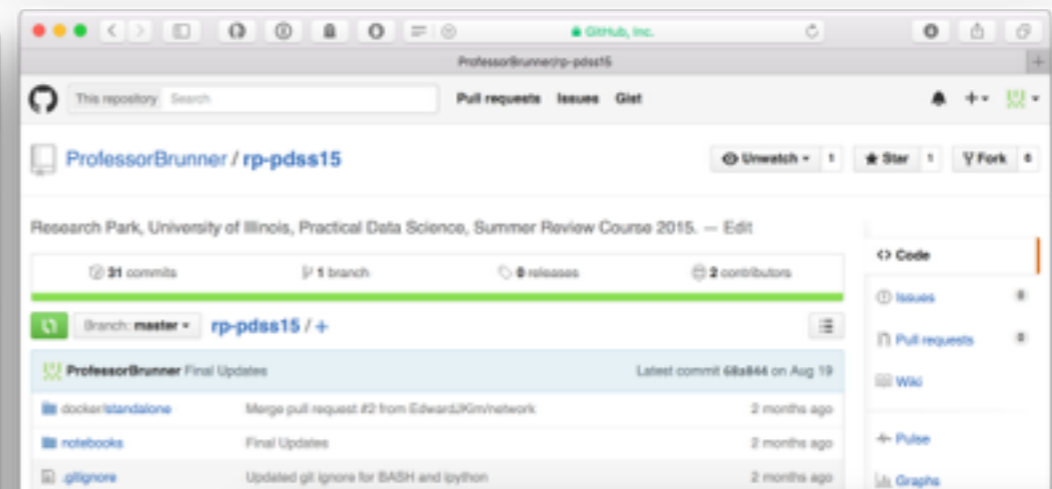
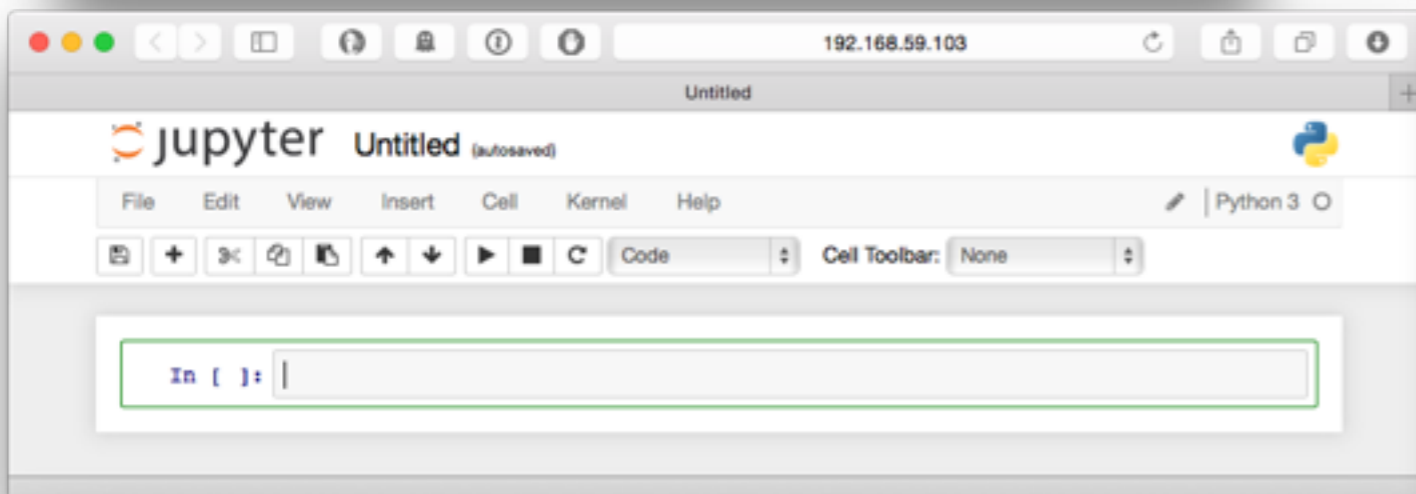
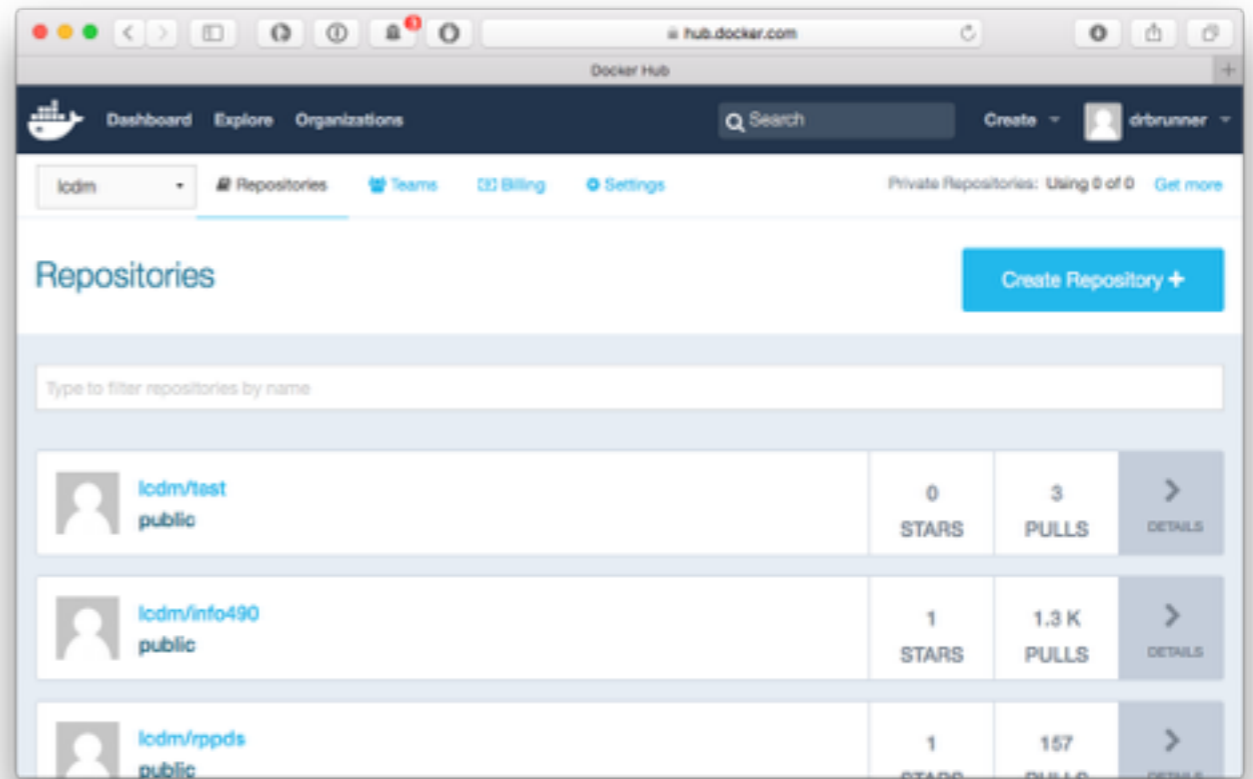
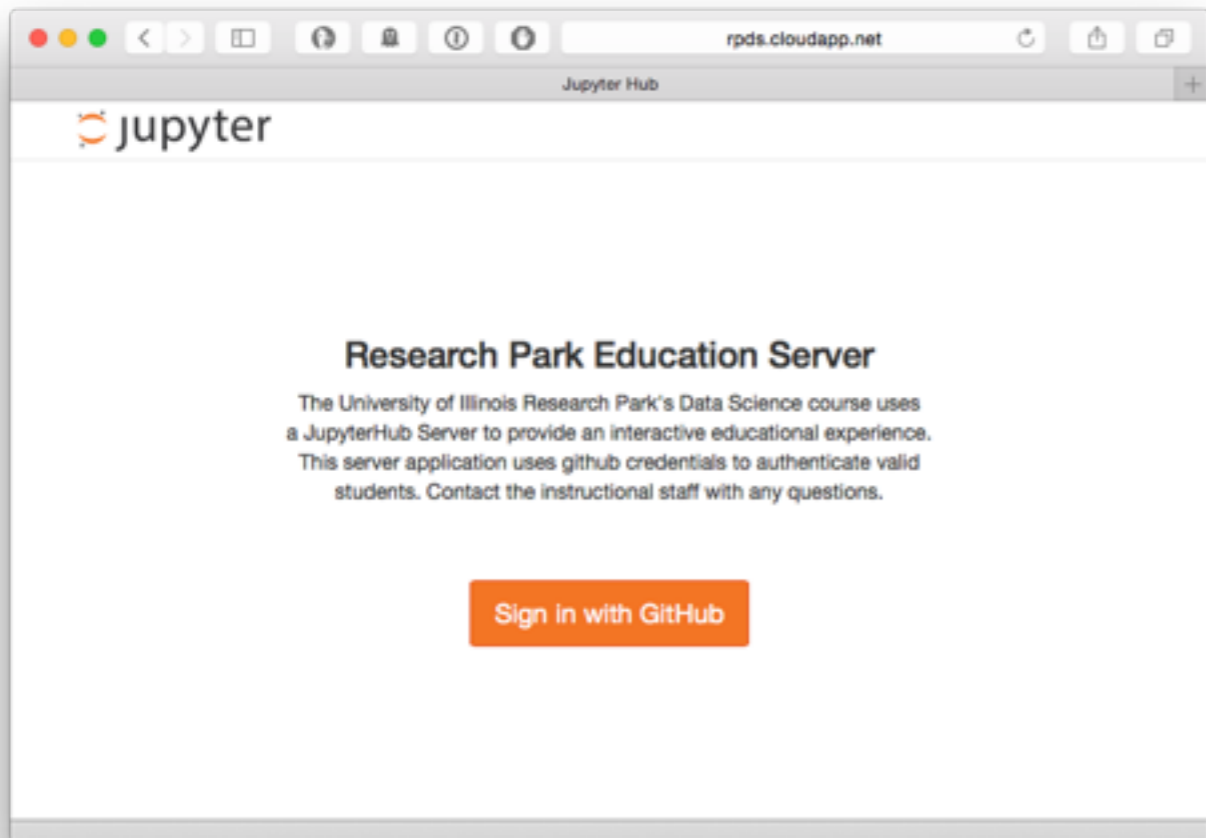
The Six Divisions (David Donoho)

1. Data Exploration and Preparation
2. Data Representation and Transformation
3. Computing with Data
4. Data Modeling
5. Data Visualization and Presentation
6. Science about Data Science

<https://dl.dropboxusercontent.com/u/23421017/50YearsDataScience.pdf>

Greater Data Science







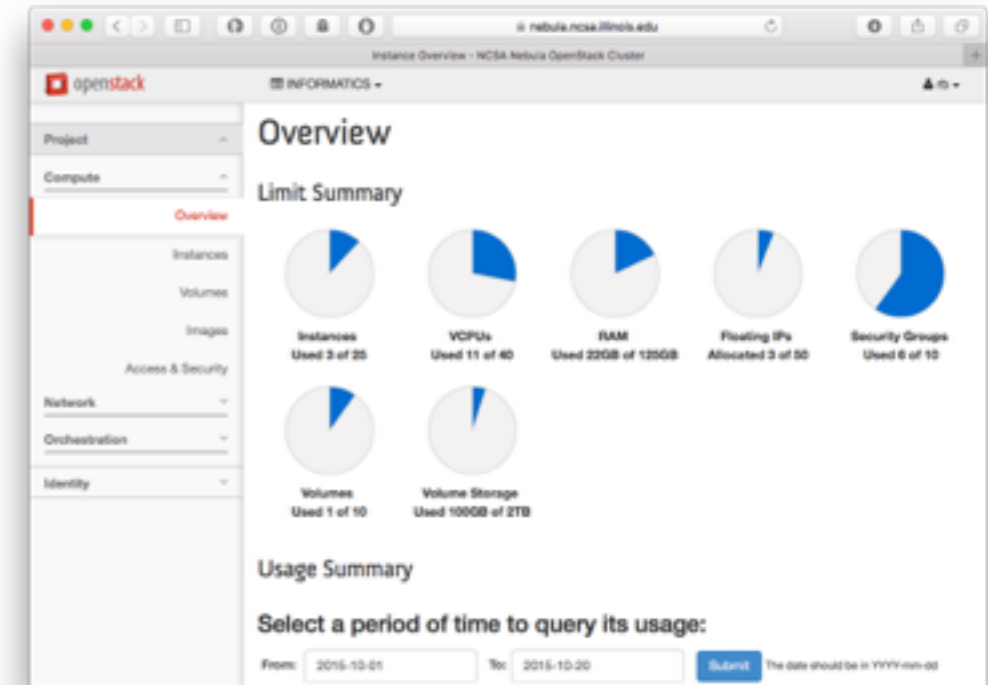
Data Science, Expert in Residence
@ Research Park, University of Illinois



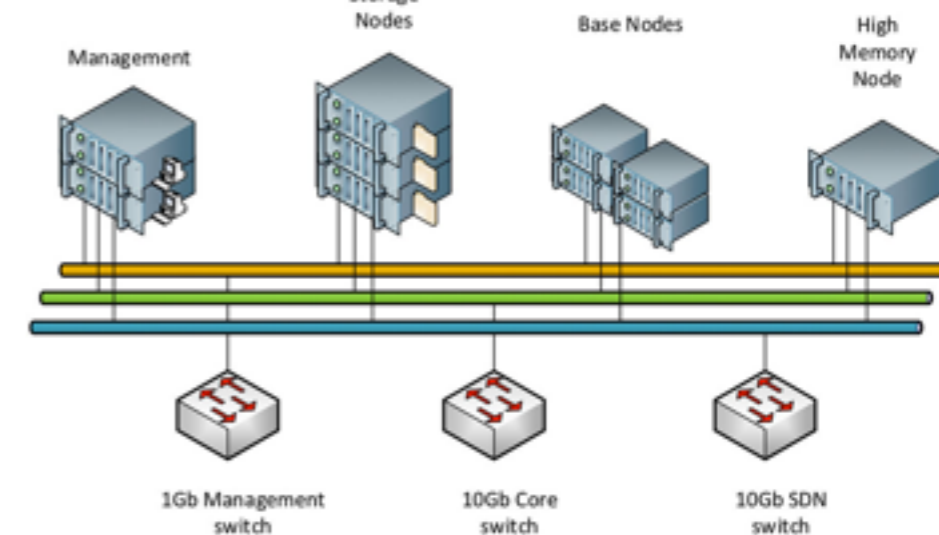
Data Science Incubator



Sandia National Laboratories

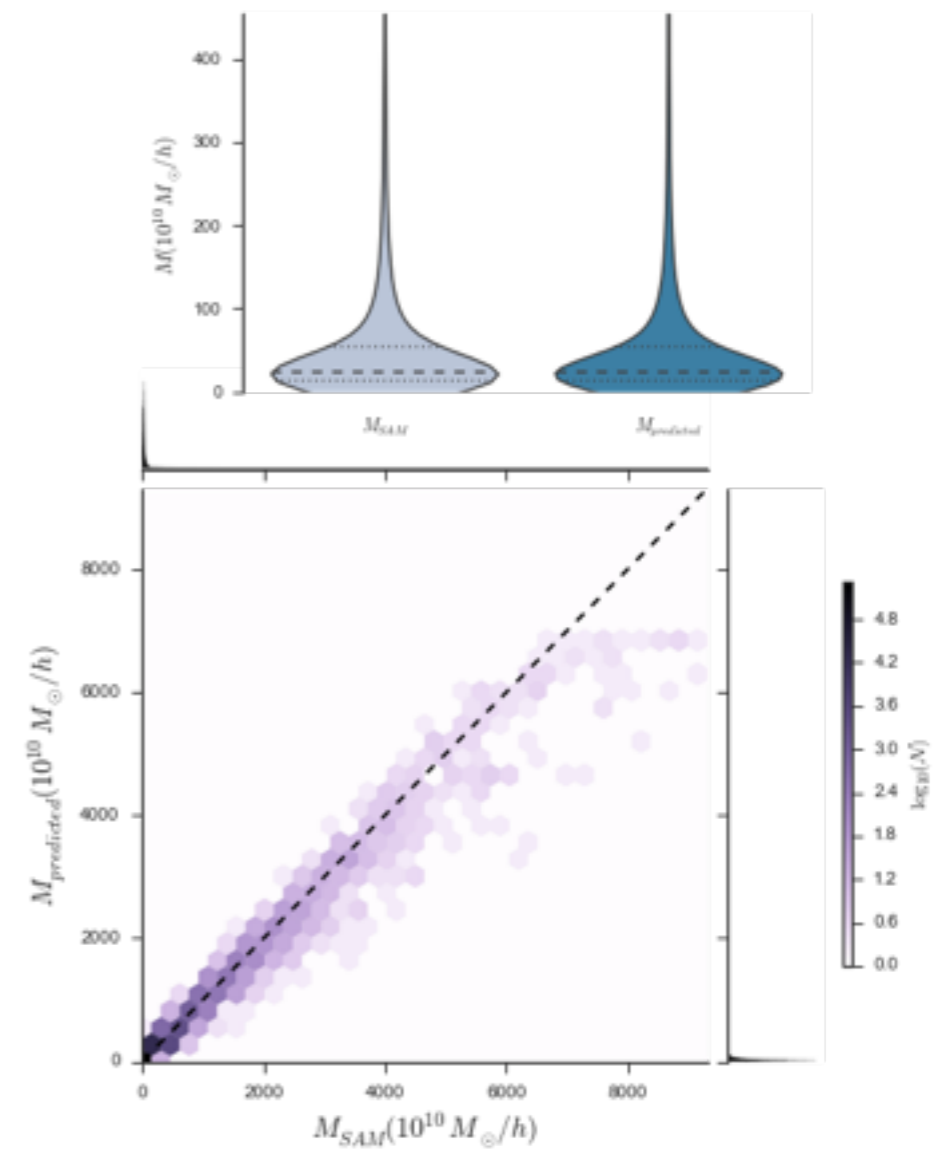
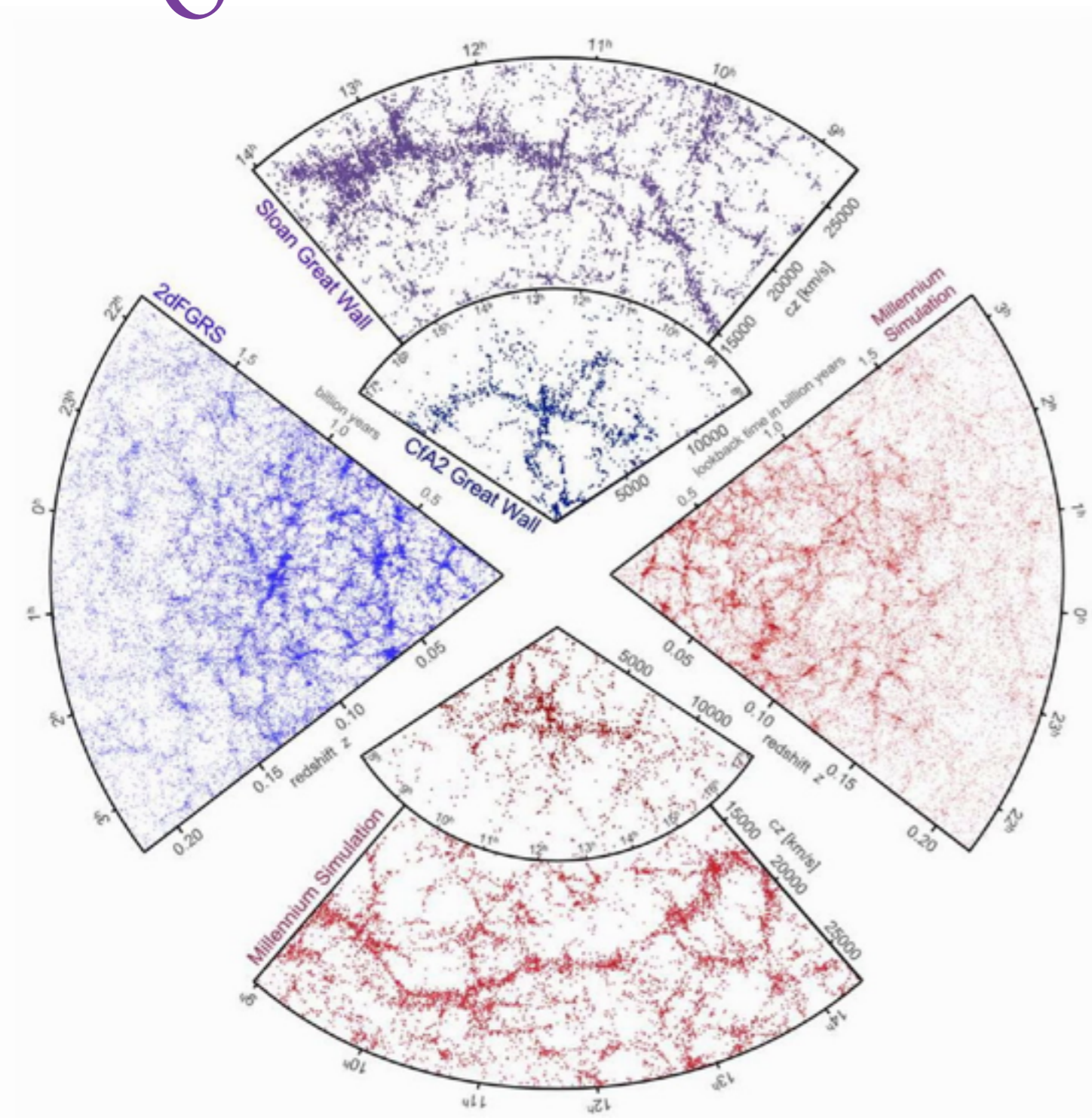


Innovative Systems Laboratory

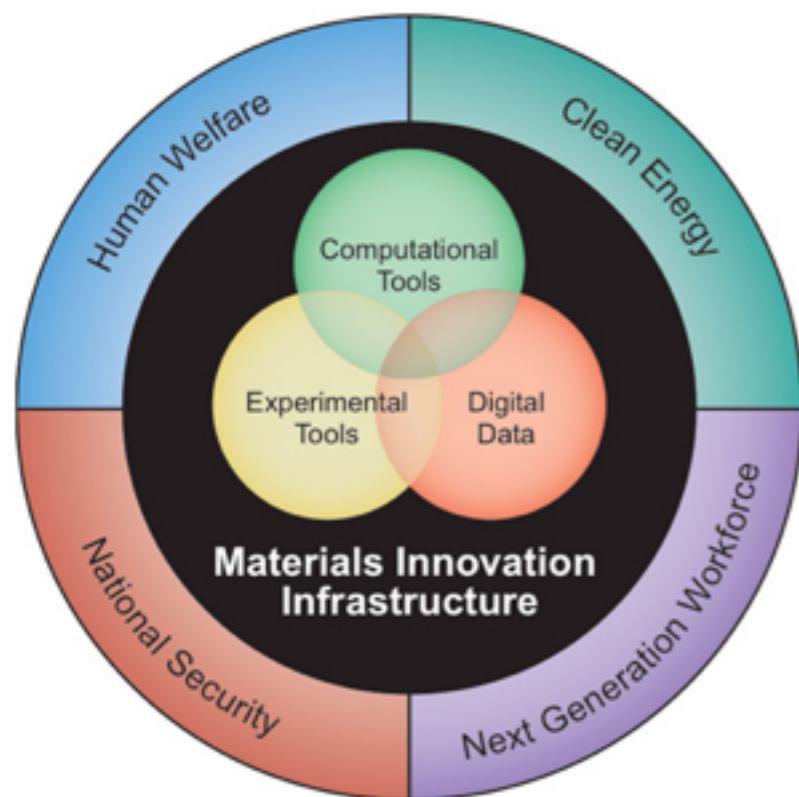


One Universe

ML + Sims



Commit	Message	Time
9178165	Added Deep Learning Guide.	Aug 14
	readme for data file merging	3 months ago
	Added Deep Learning Guide.	2 months ago
	remove some things	3 months ago
	paper	3 months ago
	Create License.md	8 months ago
	Create README.md	8 months ago



PERIODIC TABLE OF THE ELEMENTS

Standard state (25 °C, 101 kPa): Ne - gas, Fe - solid, Ga - liquid, Ts - synthetic.

1	2											18	19	20			
1	2											18	19	20			
3	4											13	14	15	16	17	18
3	4											13	14	15	16	17	18
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
55	56	57-71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86
87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118
87	88	89-103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118

LANTHANIDE

57	58	59	60	61	62	63	64	65	66	67	68	69	70	71
57	58	59	60	61	62	63	64	65	66	67	68	69	70	71

ACTINIDE

89	90	91	92	93	94	95	96	97	98	99	100	101	102	103
89	90	91	92	93	94	95	96	97	98	99	100	101	102	103

Ternary Compounds

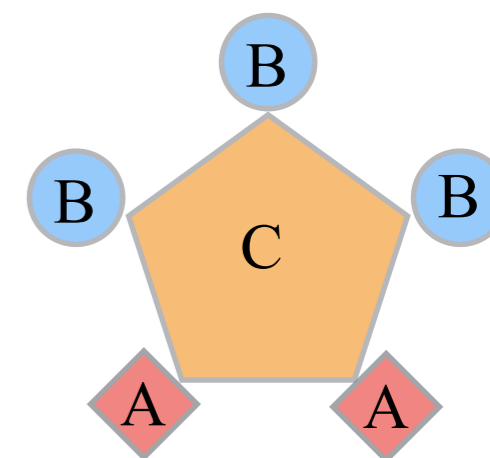
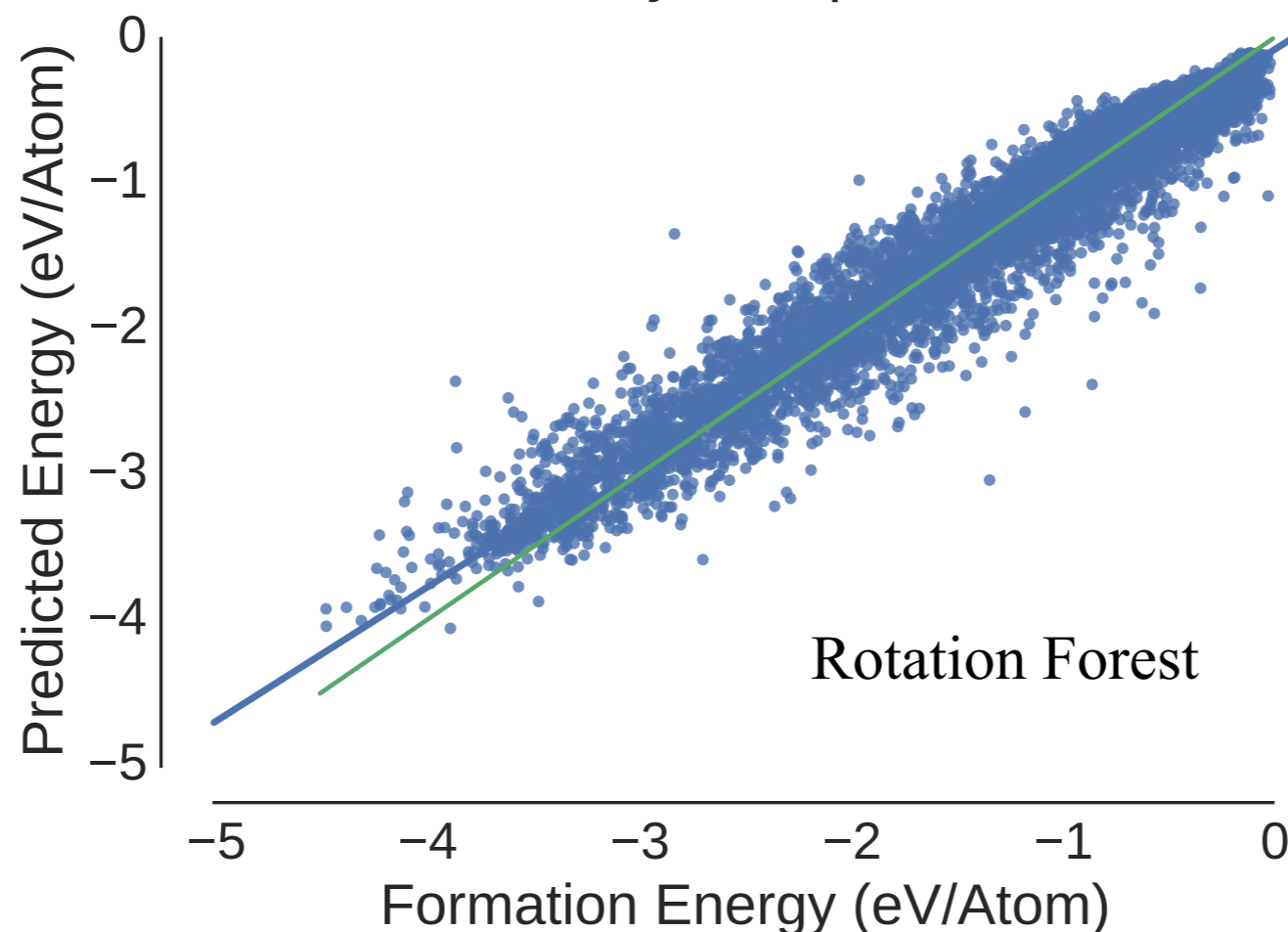
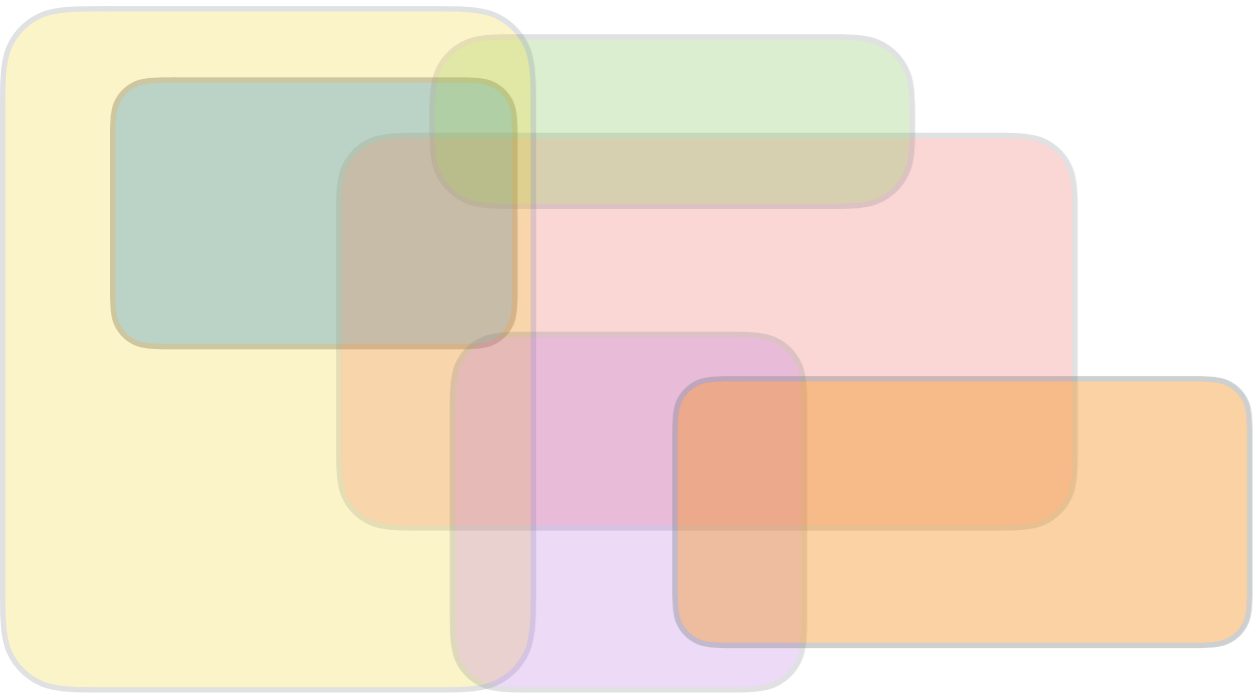
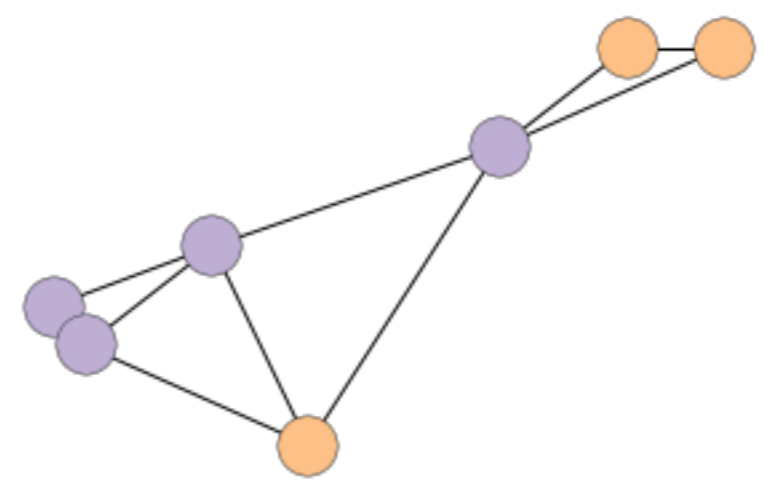


Image Search with Uncertainty



- Highschool
- Other



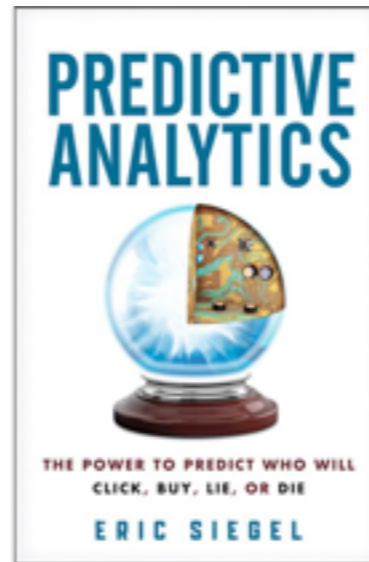


Highway safety operations model based on Internet of Things

This paper appears in: [Communication Software and Networks \(ICCSN\), 2011 IEEE 3rd International Conference on](#) , Issue Date: 27-29 May 2011 , Written by: Lin, Guoshun; Chen, Yan; Qu, Yong



Anchal Agrawal
Neeraj Asthana
Sanjana Chandrashekar
Rishabh Jain
Vaishali Khandelwal



Apache Kafka



APACHE
STORM™



**Wireless
Communication**



Takeaway Points

- 1) Defining curriculum/opportunities
- 2) Data Science Incubator

