

# CSCE 590-1: From Data to Decisions with Open Data: A Practical Introduction to AI

## Lecture 27: Text and Numeric Analysis for Finance - Invited Speaker

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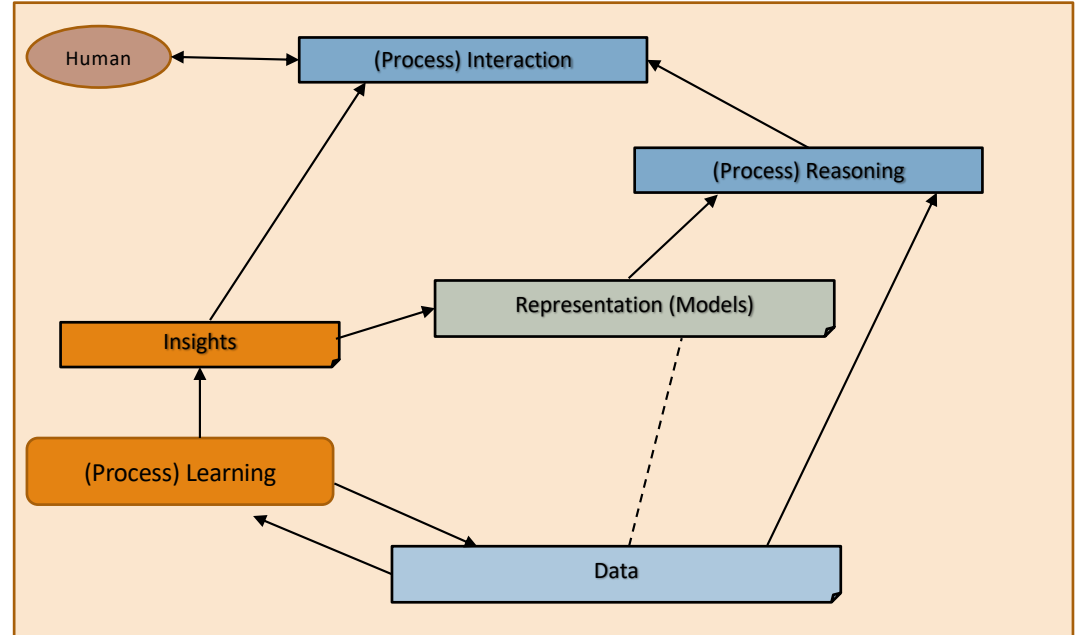
PROF. BIPLAV SRIVASTAVA, AI INSTITUTE

20<sup>TH</sup> APR, 2021

***Carolinian Creed: “I will practice personal and academic integrity.”***

# Organization of Lecture 28

- Introduction Segment
  - Recap/ Discussion of Lecture 26
- Main Segment
  - Graduate Paper Presentations (continued)
  - Invited Speaker
- Concluding Segment
  - About Next Lecture – Lecture 28
  - Ask me anything



# Introduction Segment

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# Recap of Lecture 26

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- We had graduate student paper presentations
  - Final requirements
  - 4 completed

# Main Segment

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# Paper Presentations – Graduate Students

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- Select a paper appearing at a top-AI or data conference (AAAI, IJCAI, NeurIPS, SIGMOD, WWW, ICML, VLDB, ...) during 2019-2021
- Present in class for 10 + 5 minutes of Q/A
- Things to cover
  - **Summary:** problem, solution, related work, contributions
  - **Opinion:** What you liked or did not like
- Dates
  - In-class presentation on April 15, 2021
  - 1-page written report on May 4, 2021

# Paper Presentation Order

1	Avineet Kumar	(AAAI-20) Scalable and Generalizable Social Bot Detection through Data Selection
2	Ahad Hasan	(AAAI-19) Multi3Net: Segmenting Flooded buildings via Fusion of Multiresolution, Multisensor and Multitemporal Satellite Imagery
3	Marilyn	(FAccT '21) Reasons, Values, Stakeholders: A Philosophical Framework for Explainable Artificial Intelligence
4	Rohit	(AAAI-19) Gupta, R., Kanade, A., & Shevade, S. (2019). Deep Reinforcement Learning for Syntactic Error Repair in Student Programs.
5	Vedant	(AAAI-21) Neural Analogical Matching - <a href="https://arxiv.org/abs/2004.03573">https://arxiv.org/abs/2004.03573</a> (AAAI-21)
6	Vishal	(AAAI-21) Humor Knowledge Enriched Transformer for understanding Multimodal Humor

# Lecture 14: Invited Lecture

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- **Title:** Entity Intelligence Applications in Business Analytics
- **Abstract**
  - Entity matching, linking, or disambiguation are terms used to describe the process of detecting an entity (organization, person, geolocation) mentioned in text and referencing it with an appropriate entity record. This process is useful both for updating the knowledge about the entity and for improving text search relevance. A wide range of applications in enterprise analytics, ranging from building client profiles in sales and marketing to credit risk assessment in finance, make use of entity linking. In this presentation, we will talk about those applications and some underlying NLP methodologies that enable them.
- **Speaker:** Javid Huseynov, Ph.D.,
  - Associate Professor of Professional Practice in Applied Analytics, Columbia University  
<https://sps.columbia.edu/faculty/javid-huseynov-phd>
  - Senior Technical Staff Member, IBM



# Concluding Segment

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# Upcoming Classes

21	Mar 25 (Th)	Review: project presentations, Discussion	
	Mar 30 (Tu)	Wellness Holiday	
22	Apr 1 (Th)	Text: Text Summarization	
23	Apr 6 (Tu)	Text: Representation, Sentiment	
24	Apr 8 (Th)	Text: Sentiment, Visualization	
25	Apr 13 (Tu)	Advanced: Bias and Trust Issues	Quiz 4
26	Apr 15 (Th)	Paper presentations – Graduate students	Final assignment for Graduate students
27	Apr 20 (Tu)	<b>Invited Guest</b> – Javid Huseynov – Case Study: Finance	
28	Apr 22 (Th)	Project presentations	
	Apr 27 (Tu)	Reading day	Reading day
29	Apr 29 (Th)	Project presentations	Final assignment given (undergrad)
30	May 4 (Tu)	Course Recap	Final assignment due (undergrad), Paper summary due (grad)

# About Next Lecture – Lecture 28

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# Lecture 29: Final Project Presentations

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1	Brendan	Curran
2	Sarayu	Das
3	Terric	Taylor
4	James	Thompson
5	Marilyn	Gartley

Apr 22, 2021

6	Avineet Kumar	Singh
7	Ahad Hasan	Tanim
8	Rohit	Naini
9	Vedant	Khandelwal
10	Vishal	Pallagani

Apr 29, 2021