

CS5056 Data Analytics

APRIL 7, 2021

Class 8/16

Agenda



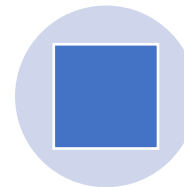
**COMMENTS ON HWA5,
MIDTERM EXAM,
STUDENT PUBLICATIONS**



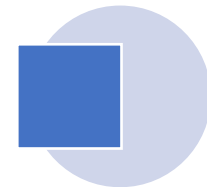
**TIME:
SUMMARY OF TIME
SERIES ANALYSIS FOR
PREDICTION**



**UNCERTAINTY:
BAYES THEOREM**



**EXPECTED VALUE
FRAMEWORK**



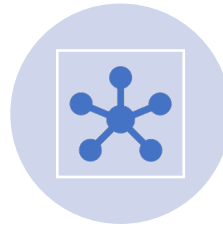
**EXERCISES AND
CASE STUDIES**

CS5056 Data Analytics

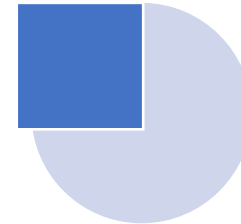
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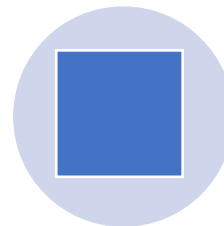
EXERCISE 1: EVF



EXERCISE 2: EVF PURCHASE



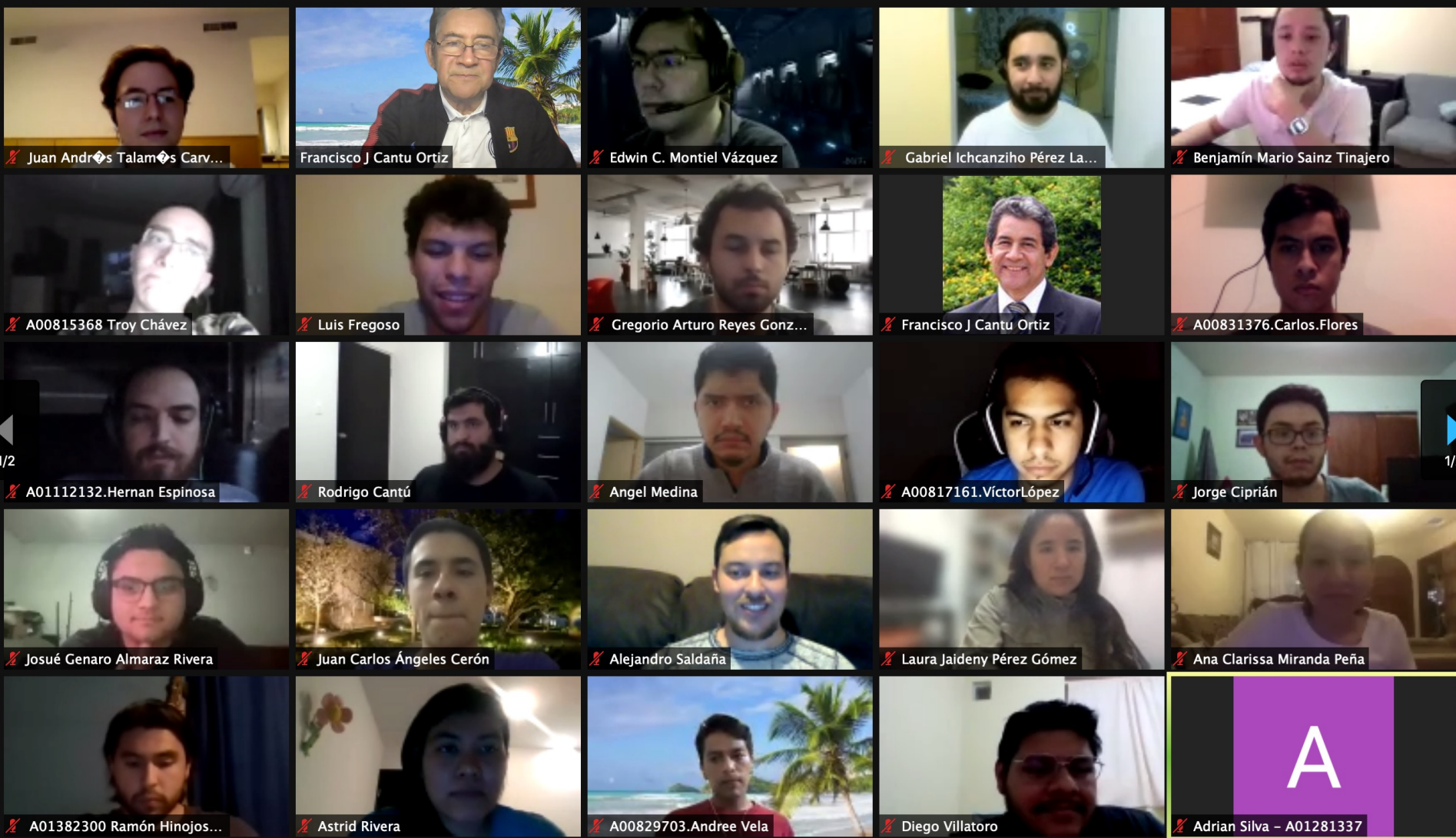
**CASE STUDY 1:
BANCOMER**







**CASE STUDY 2:
TVAZTECA**



**CASE STUDY 3:
METALSA**



 <p>Gregorio Arturo Reyes Gonz...</p>	 <p>Francisco J Cantu Ortiz</p>	 <p>A00831376.Carlos.Flores</p>	 <p>A01112132.Hernan Espinosa</p>	 <p>Rodrigo Cantú</p>
 <p>Angel Medina</p>	 <p>A00817161.VíctorLópez</p>	 <p>Jorge Ciprián</p>	 <p>Josué Genaro Almaraz Rivera</p>	 <p>Juan Carlos Ángeles Cerón</p>
 <p>Alejandro Saldaña</p>	 <p>Laura Jaideny Pérez Gómez</p>	 <p>Ana Clarissa Miranda Peña</p>	 <p>A01382300 Ramón Hinojos...</p>	 <p>Astrid Rivera</p>
 <p>A00829703.Andree Vela</p>	 <p>Diego Villatoro</p>	 <p>Adrian Silva - A01281337</p>	 <p>Alma Torres</p>	 <p>Jose Tavares</p>
 <p>Jessica Salinas</p>	 <p>Mauricio Mendez Ruiz</p>	 <p>Connecting to audio ..</p>	 <p>A00817512.SamuelRodriguez</p>	 <p>Oliver Alejandro Velázquez...</p>



Active Learning

With Various Exercises and Case Studies



**Enjoy the Class and have
Fun!!!**



HWA5

Q1: TSA Superstore

Q2: FB Prophet

Midterm Exam

Q1 – CRISP-DM – Bank Churners

Q2 – Model Validation – Telecom Churners

Q3 – Panel Data - Guns

Q4 – TSA –Superstore-Technology

Conference Presentations

IEEE CEC 2021 Paper Instructions



○ IEEE CEC 2021 <kkolodziejczak@conferencecatalysts.com>

To: ⓘ Benjamín Mario Sáinz Tinajero; ⓘ Andrés Eduardo Gutiérrez Rodríguez;
ⓘ Héctor Gibrán Ceballos Cancino; ⓘ Francisco Javier Cantú Ortiz ⓘ

Dear Author,

Congratulations on the acceptance of your paper into the 2021 IEEE Congress on Evolutionary Computation.

Paper ID: 215

Paper Title: Evolutionary Clustering Algorithm Using Supervised Classifiers

CERTIFICATE OF PARTICIPATION

This certificate is proudly awarded to

Alicia Huidobro Espejel

Affiliation: *Tecnologico de Monterrey, Mexico*

Who has presented a paper in the
2021 4th International Conference on Data Mining and
Knowledge Discovery(DMKD 2021)
Held in

Chiang Mai, Thailand, February 19-21 2021

Paper ID: K004

Paper Title: *Data Mining Techniques to build a
Recommender System*


Session Chair


Conference Chair



ICDATA'21

The 17th International Conference on Data Science

July 26 – 29, 2021 – Las Vegas, Nevada, USA



Welcome to the 17th Int. Conference on Data Science (ICDATA'21)

Non-Attendance Policy/Presentation Modes due to Coronavirus/COVID-19 – please see info [here](#).

We invite you to attend ICDATA'21 and to submit papers. ICDATA'21 offers a 4 day single-track conference, keynote speeches by world renowned scientists, special sessions and free tutorials on all aspects of data science. In the past, the data science conference has attracted a lot of presentations in formal sessions plus keynotes, and excellent tutorials, with a lot of attendees plus many more visitors from other conferences of the congress.

For further information on the 2021 World Congress in Computer Science, Computer Engineering, and Applied Computing (CSCE'21) and its conferences, please use the following link: [CSCE'21](#)

ICDATA'21 is part of CSCE'2021. ICDATA'21 is an international conference for academics and practitioners held simultaneously with other joint conferences as part of [CSCE'21](#), the 2021 World Congress in Computer Science, Computer Engineering, and Applied Computing. CSCE'21 is one of the largest annual gatherings of researchers and practitioners in computer science, computer engineering and applied computing. Each of the joint conferences in CSCE is a premier conference for presentation of advances in their respective fields. The congress includes **20 major tracks** composed of 122 technical, research, and panel sessions as well as a number of keynote lectures and tutorials. All will be held simultaneously, same location and dates (July 26-29, 2021) to facilitate cross-disciplinary knowledge transfer. This year's Congress will be a hybrid event that combines a "live" in-person event with a "virtual" online component.

It is anticipated that CSCE'21 will attract between 1,000 and 2,000 participants from about 75 countries/territories. Participants range from established researchers on Professorial level, starting researchers (post-doc, PhD, Masters and Bachelor level) and contract researchers unto practitioners applying all aspects of data science in private or public companies or research institutions. 2019, 54% of attendees were from academia, 25% from industry; 20% from government and funding agencies; and 1% unknown. About half of the attendees were from outside USA; from 69 nations.

ICDATA'21 attracts quality papers & presentations. The data science conference has been highly ranked in the past. Please to not confuse ICDATA (formerly DMIN) with other „multi-conferences“ with approximately 100% acceptance rates. The conference maintains its own program committee and manages its own thorough and objective [review process](#) of at least 2 independent reviewers (leading academics & practitioners). Over the past ten years, ICDATA has an average acceptance rate of approximately 50%. While this rate is not as low as for some top-tier conferences, it is respectable and still allows researchers from less developed countries to actively participate in the conference.

Publication & Indexing. Due to the high quality of published papers in the proceedings of CSCE in recent years, this year (2020) ALL accepted papers will be published by **Springer Nature**.

Publisher: Springer Nature – Book Series: Transactions on Computational Science & Computational Intelligence, <https://www.springer.com/series/11769>

<https://icdatascience.org/>

Data Analytics**Articles Final Projects, Feb-June 2021**

Id	Authors	Project Name	Status & Learning Outcomes
1	Diana Laura Aguilar	A Contrast Pattern-Based Analysis of the Restaurant Industry in the US in the Year 2020	
2	Josué Genaro Almaraz Rivera	COVID-19 Vaccination Progress Prediction in Mexico	
3	Cristian Yair Alvarado Elizalde Mario Alberto Mendoza Cuevas	Analyzing Factors That Generate Company Bankruptcy	
4	Luis Alfonso Rojo Sánchez Sergio Eduardo Anaya Alvarez	Current Abortion Situation Analysis in Mexico	
5	Andree Vela Juan Carlos Ángeles	INEGI 2020 Population Survey Analysis of Development Disparity of Disabled Individuals in Yucatan	
6	Rodrigo Alejandro Cantú Hernández	Fintech vs. Traditional Banks: Mexican User Experience Market Analysis	
7	Alma Socorro Torres Torres Troy David Chávez Gutiérrez	COVID-19 Impact on Labour Productivity by Industry and Region in the United Kingdom	
8	J. F. Ciprian-Sanchez G. I. Perez-Landa	Sentiment analysis on information related to news coverage on well-known news networks such as BBC, CNN, NBC, and Fox News	
9	Alejandra De Luna Pámanes Mauricio Mendez Ruiz	A sport climbing study: A data science approach	
10	Hernán Espinosa Rodríguez		
11	Jessica Salinas Espinosa Carlos Flores Munguía	Sentiment Analysis for the Identification of Misinformation on COVID-19 Vaccines	
12	Luis Fregoso Aparicio	Data Analysis for a automobile accident database from Mexico to prevent accidents and reduce insurance payment	
13	Andrés Alberto López Esquivel Arturo García Zendejas	Electric motor data analysis for temperature estimation	
14	Ramón Hinojosa Alejandro	Twitter and Reddit post analysis on the subject of Cryptocurrencies	

Data Analytics**Articles Final Projects, Feb-June 2021**

Id	Authors	Project Name	Status & Learning Outcomes
15	Victor Ivan Lopez Rodriguez	COVID-19 New Cases Prediction after Lockdown using Mobility and Recovery Data in Monterrey	
16	Alejandro Saldana Rodriguez Alejandro Lopez Vazquez	Technical Indicators in Indexed Stocks: ACRISP-DM Approach	
17	Clarissa Miranda-Péna	The Winning Formula for Football Competitions	
18	Edwin C. Montiel-Vázquez	Natural Language Processing for COVID-19 vaccine perception study	
19	Laura Jaideny Pérez Gómez	Discussion topics on COVID-19 vaccine tweets	
20	Carmina Pérez Guerrero	Metric Analysis for the Semantic Segmentation of Jet Fire Temperature Zones	
21	Gregorio Arturo Reyes González	A Bayesian Method Approach to Digital Violence Against Women	
22	Astrid Rivera Partida Diego Villatoro Geronimo	Biodiversity of the Worldwide Food Production	
24	Alfonso Angel Medina-Santana	Global Environment Facility impact on renewable energy-based rural electrification: A data analytics perspective	
25	Samuel Guadalupe Rodriguez Rodriguez	Food retail sales prediction using weather forecast	
26	Benjamín Mario Sainz Tinajero	Performance Analysis and Comparison of Multi-objective Evolutionary Clustering Algorithms	
27	Juan Andres Talamas Carvajal	Social media Effects on the market: Reddit and Twitter Data analysis on Stocks	
28	Oliver Alejandro Velázquez Flores	League of Legends and Teamfight Tactics (TBD)	

Francisco J. Cantú-Ortiz, PhD

Professor of Computer Science and Artificial Intelligence
Tecnológico de Monterrey
Enago-Academy Advisor for Strategic Alliances

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<https://scholar.google.com.mx/citations?hl=es&user=45-uuK4AAAAJ>

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