

Department of Statistics and Informatics - Research Projects for Fourth-Year Students - Academic Year 2021-2022

| | Supervising Professor | Project title | Student Name | The second student |
|----|--|---|------------------------|---------------------------|
| 1. | • Dr. Zakaria Yahya Noori Al-Jamal | • Gamma Regression Model with Application to Medical Data | • Shaimaa Khalid Saleh | • Ali Raad Mustafa |
| 2. | • Asst. Prof. Rikan Abdulaziz Ahmed | • The Problem of Multicollinearity: Causes and Solutions | • Du'aa Taha Khudair | • Sarah Saleh Sultan |
| | | • Utilizing SPSS Software to Analyze Questionnaire Data | • Israa Khamees Ahmed | • Thawab Ahmed Jasim |
| 3. | • Dr. Hiyam Abdulmajid Hayawi Qasim | • ARX Model Identification with Application | • Noor Hazem Mohammed | • Athab Nawwaf Mahmoud |
| 4. | • Dr. Haifa Abduljawad Saeed Al-Abdou | • Order Statistics and Their Applications | • Ali Younis Mohammed | • Abdullah Maher |
| 5. | • Dr. Ria Salim Mohammed Ali Al-Rassam | • Reliability Theory and Its Applications | • Ahmed Abdulrahman | • Sarah Saad Rasheed |
| 6. | • Dr. Bashar Abdulaziz Majeed Al-Talib | • Building Students' Capacities in Statistics Departments in the Era of Data Science and Big Data Analytics: An Exploratory Study | • Taqi Ali Ibrahim | • Hind Mohammed Yousif |
| 7. | • Dr. Osama Basheer Shaker Al-Hanoon | • Using Artificial Neural Networks to Forecast Temperature Time Series in Mosul City | • Maryam Wael Zaki | • Sarah Haqi Ismail |
| 8. | • Dr. Ban Ghanem Omar Ali Al-Aani | • Estimating the Parameters of the General Linear Regression Model Using Classical Methods | • Huda Ali Qasim | • Ola Ahmed Mohammed |
| 9. | • Dr. Mahasen Saleh Abdullah Al-Talib | • The Problem of Autocorrelation and Methods for Handling It in Multiple Linear Regression Models | • Amina Ali Hussein | • Amina Essam Waleed |

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| 10. | • Dr. Khalida Ahmed Mohammed Al-Hamdani | • Parameter Estimation Using Type II Censored Incomplete Data | • Aya Duraid Rasheed | • Iman Hassan Ahmed |
| 11. | • Asst. Lect. Khairy Badal Rashid Al-Rashidani | • First-Order Confirmatory Factor Analysis and Its Implementation in AMOS Software | • Zainab Tareq Abdulatif | • Ola Ahmed Fathi |
| 12. | • Dr. Safwan Nadhim Rashid Al-Ukkash | • A Study of the Weibull Distribution and Estimation of Its Scale Parameter with Application | • Ali Abdullah Suleiman | • Farouq Dhafir Ramadan |
| 13. | • Dr. Zina Mudher Yahya Al-Bazzaz | • Optimal Task Allocation | • Mohammed Abdulkhaliq | • Yousif Fattah Hassan |
| | | • Forecasting Using the Transition Matrix | • Manal Ghanem Sultan | • Dohaa Mohammed Khalaf |
| 14. | • Asst. Lect. Haila Anas Abdulmajid Al-Omari | • Variable Control Charts with Application to MA and MR Charts | • Hala Mustafa Muhyi | • Ahmed Hussein Ali |
| 15. | • Dr. Alaa Abdul-Sattar Dawood Hamodat | • Discriminant Function and Selection of Optimal Predictors | • Rahma Laith Mahmoud | • Lina Saad Hashim |
| 16. | • Asst. Lect. Mahmoud Mohammed Taher Al-Abbadi | • Fitting the Best Box-Jenkins Model for Forecasting Temperatures in Mosul City with Application | Ghufran Saad Yousif | • Alaa Nawfal Mohammed |
| | | • Applying the Modified Test to Overcome Limitations of the Least Significant Difference Test | • Layla Abdulrahman | |
| 17. | • Asst. Lect. Wissam Waadallah Saleem Al-Hayali | • Statistical Study Using Factorial Experiments on Students of the Statistics and Informatics Department for the Academic Year 2021-2022 | • Zainab Muzhaffar Ali | • Safa Ahmed Jumaa |
| | | • Statistical Analysis of Split-Plot Factorial Experiment with Application | • Alaa Thaer Taha | • Amani Nashwan Salem |
| 18. | • Asst. Lect. Omar Salim Ibrahim Al-Hayali | • A Comparison Between the ARIMA Model and Linear Regression Model | • Hajar Hazem Hassan | • Kawthar Abdullah |
| 19. | • Dr. Najlaa Saad Ibrahim Al-Sharabi | • Diagnosing Box-Jenkins Models for OPEC Crude Oil Prices | • Aya Abdulghani Hamed | • Jihan Jawad Jasim |

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| 20. | • Asst. Lect. Israa Abduljawad Al-Ameen | • Forecasting Central Bank Foreign Currency Sales Using Box–Jenkins Models | • Nafe' Shamil Nafe' | • Wud Yahya Othman |
| | | • Estimating Regression Parameters Using OLS and Linear Programming Methods | • Abdullah Ameen Fathi | • Omar Mohammed Jasim |
| 21. | • Dr. Mohammed Qasim Yahya Al-Awjar | • Using Graph Theory in Task Allocation | • Noor Abdulmoneim | • Noor Waleed Ghazi |
| 22. | • Dr. Noursel Ahmed Zain Al-Abideen | • Comparing the Intervention Model with the ARIMA Model in Time Series | • Aya Atheer Kamil | • Shaimaa Hatim Thanoon |
| 23. | • Asst. Lect. Nada Nizar Mohammed Abdullah Al-Obaidi | • A Comparison Between Logistic Regression and Discriminant Analysis in the Presence of Multicollinearity with Application | • Reem Najmuddin | • Khalil Salem Khalil |
| 24. | • Asst. Lect. Shaimaa Waleed Mahmoud Borzan | • Estimating the Transition Matrix for a Two-State Markov Chain | • Khalid Mohammed Habash | • Samer Saadoon Dhidan |
| 25. | • Asst. Lect. Rihad Imad Sliwa Shamni | • Utilizing the Bootstrap Logistic Regression Model Versus the Traditional Model: A Comparative Study with Application | • Israa Taha Yaseen | • Zahraa Mohammed Ali |
| 26. | • Dr. Lama Akram Abdullah Al-Saffar | • Statistical Visualization: Viewing Data Patterns and Trends | • Yomna Abdullah Ramadan | • Hajar Laith Misha'an |
| | | • Applying the Gabor Filter or Filter Bank to 2-D Images | • Elaf Majid Abdulaziz | • Abdulrahman Alaa Al-Deen |
| 27. | • Inst. Farah Abdulghani Al-Obaidi | • A Study on Factors Influencing the Incidence of Diabetes | • Aya Yasser Waleed | • Ammar Hassan Marai |
| | | • Outlier Detection and Treatment Methods | • Ibrahim Ali Hamoud | • Ahmed Mohammed Suleiman |
| 28. | • Inst. Heba Suleiman Dawood Al-Hafidh | • Selecting the Best Time Series Model Using Selection Criteria | • Ibrahim Salam Ibrahim | • Hanan Mohammed Khudhur |
| | | • Using Neural Networks to Identify the Best Time Series Model Based on the AIC Criterion | • Mustafa Mohammed Diyaa | • Muhannad Fathallah |

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| 29. | • Inst. Noor Nozat Ahmed Sayala | • Applying Hierarchical Methods in Cluster Analysis: An Applied Study | • Fatima Amer | • Abdulhameed Saleh |
| | | • Analyzing the Proportion of Chronic Disease Cases in Iraqi Provinces in 2007 Using Factor Analysis | • Zahraa Shareef Ahmed | • Tabarak Talal Muhyi |
| 30. | • Inst. Rafal Adeeb Othman Al-Hamdani | • Using Pareto Chart Technique in Statistical Process Control and Quality Assurance | • Aya Hassan Ali | • Dalal Nizar Fadhil |
| | | • Matrices and Their Applications in Various Applied Fields | • Mohammed Fawaz Ismail | • Sarah Abdulkarim Mohammed |
| 31. | • Inst. Hisham Yaseen Abbas Al-Ameen | • Using Kernel Density Estimation to Estimate the Density of Similar Points in a Colored Image | • Munhil Ameen Mohammed | • Mohammed Yaseen Fathi |
| | | • Optimal Method Selection for Measuring Similarity Between Elements with Similar Characteristics | • Asmaa Abdullah Ali | • Abdul Sattar Majid |
| 32. | • Inst. Neam Salim Fadhil Al-Saffar | • Applying the Box–Jenkins Methodology to Forecast Relative Humidity Data in Mosul | • Anmar Ali Salman | • Darwan Saadoon Saber |
| | | • Forecasting Humidity Data in Mosul Using Exponential Smoothing Models | • Bashar Mohammed Khalifa | • Yasmin Moayad Mohammed |
| 33. | • Inst. Talal Abdulrazzaq Al-Hasso | • The Importance of Applying WinQSB System in Operations Research | • Jasim Salman Jasim | • Ahmed Saleh Bilal |
| | | • Operations Research: Concepts and Applications | • Nibras Mohammed Hussein | • Noor Adnan Ahmed |
| 34. | • Inst. Omar Qusay Jasim | • Using Logistic Regression Model to Classify Mass Shape in Medical Images | • Zainab Maher Majeed | • Raghad Hassan Abdullah |
| | | • A Study on the Importance of Factors Influencing Chronic Kidney Disease Patients Based on the Poisson Regression Model | • Rania Hussein Ali | • Noor Rafi Mahmoud |