Dhafer Malouche, Ph.D., Professor of Statistics
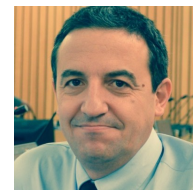
The American University in Cairo

✉ dhafer.malouche@aucegypt.edu,
🌐 https://dhafermalouche.net/
○ https://github.com/malouche, https://www.covidradar24.org
G Google scholar page

Employment History

July 2021 – · · · ·	**The American University in Cairo**, Professor of Statistics, Department of Mathematics and Actuarial Science, School of Sciences and Engineering.
04/2021 – · · · ·	**Pan-African Scientific Research Council**, Fellow member.
10/2020 – – · · · ·	**Covidradar24.org** and **Rosettahub.com**, Data analyst master contributor in a real time COVID-19 tracking data science platform.
05/2020 - 05/2021	**World Health Organization, Tunisia** Senior data analyst consultant, Measuring the impact of the COVID 19 pandemic on psychiatric needs of the general population in Tunisia, data collected from a hot line accessible throughout the country, including those without access to Internet.
05/2020 – 01/2021	**WARC, Africa, Sierra Leon** Data analyst consultant, Setting up an online daily data monitoring platform for a survey implemented in Sierra Lean.
2003 – · · · ·	**University of Carthage,** Ecole Supérieure de la Statistique et de l'Analyse de l'Information, Tunis, Tunisia

- **Positions:** Professor (from 2018), Associate Professor (2011-2018), Assistant Professor (2003-2011).

- **Teaching:** Data Analysis: Principal Component Analysis, Correspondence Analysis, and Multiple Correspondence Analysis, Theory and Practice with `R`, Mathematical Statistics: Statistical Inference, Hypothesis Testing, Regression Analysis, Theory and Practice with `R`, Data Mining and Practice with `R`, Bayesian Statistics with `OpenBugs/Winbugs/RStan/Jags`, Time Series: ARMA and SARIMA Processes, Theory and Practice with `R/Python`, Big Data: Large Data with `R/Python`, `SQL`, `Spark`, `H2O`, Advanced `R/Python`: Data Management, Data Visualization, Dashboards, Shiny Apps, Heroku Apps, Bokeh.

- **Research:**

  - Supervising 5 Ph.D.: Detection and classification of swallowing sound, Sensory Analysis, Genetics, Zoonotic cutaneous leishmaniasis incidence, Cardiovascular risk factor.

  - Papers and collaborations: I had published and coauthored more than 40 scholar papers.

  - Supervising Master and Engineering Thesis on several topics related to applied statistics and data science.

- **Administration:** Director of the Department of Statistics (2004-2007)

2014 – 2019	**Yale University,** Whitney and Betty MacMillan Center for International and Area Studies and the Department of Statistics and Data Science, New Haven, USA.

- **Positions:** Visiting Associate Professor (2014), Consulting on several projects with Yale Scholars (2015-2018), Associate Research Scholar (2019).

- **Missions:** Democratic Transition in Tunisia, Governance and Local Development: Implementing two face-o-face Surveys in Tunisia, G-econ team on building local GDP data, Teaching Time Series with `R/Python` Course.

Employment History (continued)

2016 – 2017   🔖 **University of Michigan**, Center for Political Studies of the Institute for Social Research, Ann Arbor, USA.

- **Position:** Visiting Fulbright Scholar.

- **Role:** Research: Working on Data Quality, Survey Methodology, Interviewer Effect, Teaching: 4 Lectures on Applied graphical Models, 1 Lecture on Data visualization with R, 1 Lecture on Sensory Analysis.

2011 (May to July)   🔖 **Stanford University**, Department of Statistics, Palo alto, USA.

- **Position:** Visiting Fulbright Scholar.

- **Role:** Research on Graphical Models, Faithfulness assumption, and Covariance graphs.

2002 – 2003   🔖 **York University**, Department of Statistics, Toronto, Canada.

- **Position:** Visiting Assistant Professor,

- **Teaching:** Applied Regression Models with SAS, Introduction to the theory of probability, Introduction to Statistics with Minitab,

- **Research:** Monte Carlo Methods and Bayesian Estimation of the Graphical Models.

1998 – 2002   🔖 **University of Sousse** , Institut Préparatoire aux Ecoles d'Ingénieurs, Sousse, Tunis.

- **Teaching:** Analysis, Calculus, Algebra

- **Research:** Natural Exponential Families, Pick functions, Markov Chains

- **Administration:** Director of the Department of Mathematics

Education

Sept 2009   🔖 **Habilitation *(Tenure)*, Université de Tunis El Manar** Ecole National d'Ingénieurs de Tunis, Tunisia.
Thesis title: *Problèmes autour de la probabilité et de la statistique: Méthodes et Applications.*
Dissertation: `https://malouche.github.io/myCV/reports.html` ✎

October 1997   🔖 **Doctorate, *(Ph.D.)*, Paul Sabatier University,** Toulouse, France.
Thesis title: *Classification des familles exponentielles associées à des fonctions Pick.*
Dissertation: `https://malouche.github.io/myCV/reports.html` ✎

1993–1994   🔖 **Master's Degree (D.E.A), Paul Sabatier University,** Applied Mathematics.

1989 – 1993   🔖 **Bachelor (Maîtrise)**, Ecole Normale Supérieure de Bizerte, Tunisia.

Skills

Languages   🔖 Strong reading, writing and speaking competencies for English, French, and Arabic.

Coding   🔖 Python, R, TABLEAU, SPARK, H2O, Shiny, LaTeX, …

Misc.   🔖 Quantitative research, Project management, Qualitative research, Data Mining, Machine Learning, Big Data, Academic research, Teaching, training, consultation, LaTeX typesetting and publishing.

Papers

Research interests: Graphical models, Public health, COVID-19, Research and development, Well being, Survey methodology, Data quality, Consumer preferences, Genetics.

Research papers

1 Malouche, D. (2021c). Implication of faithfulness assumption. *Sankhyā B : The Indian Journal of Statistics*. Retrieved from 🔗 https://doi.org/10.1007/s13571-021-00271-0

2 Saidi, O., Malouche, D., Saksena, P., Arfaoui, L., Talmoudi, K., Hchaichi, A., … Ben Alaya, N. (2020). Impact of contact tracing, respect of isolation and lockdown in reducing the number of cases infected with covid-19: Case study: Tunisia's response from march 22 to 04 may 2020. *International Journal of Infectious Diseases*. Retrieved from 🔗 https://doi.org/10.1016/j.ijid.2021.02.010

3 Kongbonga, G. Y. M., Hassine, K. B., Ghalila, H., Malouche, D. et al. (2019). Front-face fluorescence using uv-led coupled to usb spectrometer to discriminate between virgin olive oil from two cultivars. *Food and Nutrition Sciences*, *10*(02), 119. Retrieved from 🔗 http://www.scirp.org/journal/PaperInformation.aspx?PaperID=90405&#abstract

4 Mekki, I., Malouche, D., Smeti, S., Hajji, H., Mahouachi, M., M, E., & Atti, N. (2019). Study of the breeding systems of sheeps in the montagnous area of north-western tunisia. *Livestock Research for Rural Development*, *31*(108). Retrieved from 🔗 http://www.lrrd.org/lrrd31/7/ilyes31108.html

5 Saidi, O., Hajjem, S., Zoghlami, N., Aounallah-Skhiri, H., Mansour, N. B., Hsairi, M., … O'Flaherty, M. et al. (2019). Premature mortality attributable to smoking among tunisian men in 2009. *Tobacco induced diseases*, *17*. Retrieved from 🔗 https://dx.doi.org/10.18332%2Ftid%2F112666

6 Saidi, O., O'Flaherty, M., Zoghlami, N., Malouche, D., Capewell, S., Critchley, J. A., … Guzman Castillo, M. (2019). Comparing strategies to prevent stroke and ischemic heart disease in the tunisian population: Markov modeling approach using a comprehensive sensitivity analysis algorithm. *Computational and mathematical methods in medicine*, *2019*. Retrieved from 🔗 https://doi.org/10.1155/2019/2123079

7 Saidi, O., Zoghlami, N., Bennett, K. E., Mosquera, P. A., Malouche, D., Capewell, S., … O'Flaherty, M. (2019). Explaining income-related inequalities in cardiovascular risk factors in tunisian adults during the last decade: Comparison of sensitivity analysis of logistic regression and wagstaff decomposition analysis. *International journal for equity in health*, *18*(1), 177. Retrieved from 🔗 https://equityhealthj.biomedcentral.com/articles/10.1186/s12939-019-1047-6

8 Salem, S., Malouche, D., & Romdhane, H. B. (2019). Tunisian population quality of life: A general analysis using sf-36. *Eastern Mediterranean Health Journal*, *25*(9). Retrieved from 🔗 https://apps.who.int/iris/bitstream/handle/10665/333459/10203397192509-eng.pdf#page=23

9 Khlaifi, H., Istrate, D., Demongeot, J., & Malouche, D. (2018). Swallowing sound recognition at home using gmm. *IRBM*, *39*(6), 407–412. JETSAN. 🔗 doi:https://doi.org/10.1016/j.irbm.2018.10.009

10 Benstead, L. J., Kao, K., Landry, P. F., Lust, E. M., & Malouche, D. (2017). Using tablet computers to implement surveys in challenging environments. *Survey Practice*, *10*(2), 1–9. Retrieved from 🔗 https://doi.org/10.29115/SP-2017-0009

11 Khouloud, T., Hedia, B., Nissaf, B.-A., Marc, S., Dhafer, M., & Kouni, C. M. (2017). Comparative performance analysis for generalized additive and generalized linear modeling in epidemiology. *International Journal of Advanced Computer Science and Applications*, *8*(12). 🔗 doi:10.14569/IJACSA.2017.081255

12 Rebhi, I., & Malouche, D. (2017a). An approach for external preference mapping improvement by denoising consumer rating data. *International Journal of Advanced Computer science and Applications*, *8*(12), 500–508. Retrieved from 🔗 https://doi.org/10.14569/IJACSA.2017.081266

13 Rebhi, I., & Malouche, D. (2017b). Decision making about products development through consumer preferences modeling based on descriptive characteristics of products. *IEEE/ACS 14th International Conference on Computer Systems and Applications (AICCSA)*, 423–430. Retrieved from 🔗 https://doi.org/10.1109/AICCSA.2017.202

14 Talmoudi, K., Bellali, H., Ben-Alaya, N., Saez, M., Malouche, D., & Chahed, M. K. (2017). Modeling zoonotic cutaneous leishmaniasis incidence in central tunisia from 2009-2015: Forecasting models using climate variables as predictors. *PLoS neglected tropical diseases*, *11*(8), e0005844. Retrieved from 🔗 https://doi.org/10.1371/journal.pntd.0005844

15 Triki, H. Z., Laabir, M., Lafabrie, C., Malouche, D., Bancon-Montigny, C., Gonzalez, C., … Daly-Yahia, O. K. (2017). Do the levels of industrial pollutants influence the distribution and abundance of dinoflagellate cysts in the

recently-deposited sediment of a mediterranean coastal ecosystem? *Science of the Total Environment*, *595*, 380–392. Retrieved from 🔗 https://doi.org/10.1016/j.scitotenv.2017.03.183

16 Aouinti, S., Giudicelli, V., Duroux, P., Malouche, D., Kossida, S., & Lefranc, M.-P. (2016). Imgt/statclonotype for pairwise evaluation and visualization of ngs ig and tr imgt clonotype (aa) diversity or expression from imgt/highv-quest. *Frontiers in immunology*, *7*, 339. Retrieved from 🔗 https://doi.org/10.3389/fimmu.2016.00339

17 Aouinti, S., Malouche, D., Giudicelli, V., Kossida, S., & Lefranc, M.-P. (2016). Correction: Imgt/highv-quest statistical significance of imgt clonotype (aa) diversity per gene for standardized comparisons of next generation sequencing immunoprofiles of immunoglobulins and t cell receptors. *PloS one*, *11*(1), e0146702. Retrieved from 🔗 https://doi.org/10.1371/journal.pone.0146702

18 Kerfai, N., Bejar Ghadhab, B., & Malouche, D. (2016). Performance measurement and quality costing in tunisian manufacturing companies. *The TQM Journal*, *28*(4), 588–596. Retrieved from 🔗 https://www.emerald.com/insight/content/doi/10.1108/TQM-10-2013-0119/full/html

19 Saidi, O., Malouche, D., O'Flaherty, M., Mansour, N. B., Skhiri, H., Romdhane, H. B., & Bezdah, L. (2016). Assessment of cardiovascular risk in tunisia: Applying the framingham risk score to national survey data. *BMJ open*, *6*(11), e009195. Retrieved from 🔗 https://doi.org/10.1136/bmjopen-2015-009195

20 Selmi, G., Azouz, Z. B., & Malouche, D. (2015). The volume radius function: A new descriptor for the segmentation of volumetric medical images. *2015 International Conference on Image and Vision Computing New Zealand (IVCNZ)*, 1–6. 🔗 doi:10.1109/IVCNZ.2015.7761572

21 Aouinti, S., Malouche, D., Giudicelli, V., Kossida, S., & Lefranc, M.-P. (2015). Imgt/highv-quest statistical significance of imgt clonotype (aa) diversity per gene for standardized comparisons of next generation sequencing immunoprofiles of immunoglobulins and t cell receptors. *PLoS One*, *10*(11), e0142353. Retrieved from 🔗 https://pubmed.ncbi.nlm.nih.gov/26540440/

22 Hassine, K. B., Taamalli, A., Slama, M. B., Khouloud, T., Kiristakis, A., Benincasa, C., … Bornaz, S. et al. (2015). Characterization and preference mapping of autochthonous and introduced olive oil cultivars in tunisia. *European Journal of Lipid Science and Technology*, *117*(1), 112–121. Retrieved from 🔗 https://doi.org/10.1002/ejlt.201400049

23 Saidi, O., O'Flaherty, M., Mansour, N. B., Aissi, W., Lassoued, O., Capewell, S., … Romdhane, H. B. (2015). Forecasting tunisian type 2 diabetes prevalence to 2027: Validation of a simple model. *BMC public health*, *15*(1), 104. Retrieved from 🔗 https://bmcpublichealth.biomedcentral.com/articles/10.1186/s12889-015-1416-z

24 Ghribi, K., Sevestre, S., Guessoum, Z., Gil-Quijano, J., Malouche, D., & Youssef, A. (2014). A survey on multi-agent management approaches in the context of intelligent energy systems. *2014 International Conference on Electrical Sciences and Technologies in Maghreb (CISTEM)*, 1–8. 🔗 doi:10.1109/CISTEM.2014.7077030

25 Hassine, K. B., El Riachy, M., Taamalli, A., Malouche, D., Ayadi, M., Talmoudi, K., … Romano, E. et al. (2014). Consumer discrimination of chemlali and arbequina olive oil cultivars according to their cultivar, geographical origin, and processing system. *European journal of lipid science and technology*, *116*(7), 812–824. Retrieved from 🔗 https://doi.org/10.1002/ejlt.201300254

26 Karaoud, M., Bouafif, N., Malouche, D., Kouni, C., & Achour, N. (2014). La mortalité parmi les enfants âgés de moins de 15 ans en tunisie peut être liée à la température. *Revue d'Épidémiologie et de Santé Publique*, *62*, S122. Retrieved from 🔗 https://www.em-consulte.com/article/911510/article/la-mortalite-parmi-les-enfants-ages-de-moins-de-15

27 Karaoud, M., Malouche, D. et al. (2014). Les effets de la température sur la mortalité chez les personnes âgées en tunisie. *Revue d'Épidémiologie et de Santé Publique*, *62*, S219–S220. Retrieved from 🔗 https://www.em-consulte.com/article/915656/les-effets-de-la-temperature-sur-la-mortalite-chez

28 Karaoud, M., Malouche, D., & Alaya, N. B. (2014). Mortalité et température journalière en tunisie: Une étude multi-région. *Revue d'Épidémiologie et de Santé Publique*, *62*, S218. Retrieved from 🔗 https://www.em-consulte.com/article/915651/article/mortalite-et-temperature-journaliere-en-tunisie%C2%A0-u

29 Karaoud, M., Malouche, D., & Bouafif, N. (2014). Méthodologie de l'analyse de la relation température–mortalité en tunisie. *Revue d'Épidémiologie et de Santé Publique*, *62*, S141–S142. Retrieved from 🔗 https://www.em-consulte.com/article/911552/article/methodologie-de-l-analyse-de-la-relation-temperatu

30 Triki, H. Z., Daly-Yahia, O. K., Malouche, D., Komiha, Y., Deidun, A., Brahim, M. et al. (2014). Distribution of resting cysts of the potentially toxic dinoflagellate alexandrium pseudogonyaulax in recently-deposited sediment within bizerte

lagoon (mediterranean coast, tunisia). *Marine pollution bulletin*, *84*(1-2), 172–181. Retrieved from
🔗 https://doi.org/10.1016/j.marpolbul.2014.05.014

31 Aouinti, S., Mallek, H., Malouche, D., Saidi, O., Lassouedi, O., Hentati, F., & Romdhane, H. B. (2013). Graphical interaction models to extract predictive risk factors of the cost of managing stroke in tunisia. *2013 International Conference on Computer Medical Applications (ICCMA)*, 1–6. Retrieved from 🔗 https://ieeexplore.ieee.org/document/6506162

32 Ben-Hassine, K., Taamalli, A., Ferchichi, S., Mlaouah, A., Benincasa, C., Romano, E., … Hammami, M. (2013). Physicochemical and sensory characteristics of virgin olive oils in relation to cultivar, extraction system and storage conditions. *Food research international*, *54*(2), 1915–1925. Retrieved from
🔗 https://scholar.cnki.net/Detail/doi/GARJ2013/SJES14010600411056

33 Fehri, R., Rifi, H., Alboueiri, A., Malouche, D., Ayadi, M., Rais, H., & Mezlini, A. (2013). Carcinoma of unknown primary: Retrospective study of 437 patients treated at salah azaiez institute. *La Tunisie medicale*, *91*(3), 205–208. Retrieved from
🔗 https://www.latunisiemedicale.com/article-medicale-tunisie_2165_en

34 Benstead, L. J., Lust, E., & Malouche, D. (2012). Tunisian post-election survey: Presentation of initial results. *Unpublished media briefing, Portland State University, Portland, OR*.

35 Hassine, K. B., Taamalli, A., Malouche, D., Kammoun, N., Lazzez, A., Benincasa, C., … Bouaziz, M. (2012). Influence of variety, geographical site and extraction system on virgin olive oil (voo) linoleic acid composition and its impact on consumer preference. *Linoleic Acids*, 97. Retrieved from 🔗 https://www.researchgate.net/publication/288652330_Influence_of_variety_geographical_site_and_extraction_system_on_virgin_olive_oil_VOO_linoleic_acid_composition_and_its_impact_on_consumer_preference

36 Malouche, D., & Rajaratnam, B. (2011). Gaussian covariance faithful markov trees. *Journal of Probability and Statistics*, *2011*. Retrieved from 🔗 https://doi.org/10.1155/2011/152942

37 Ranjanomennahary, P., Ghalila, S. S., Malouche, D., Marchadier, A., Rachidi, M., Benhamou, C., & Chappard, C. (2011). Comparison of radiograph-based texture analysis and bone mineral density with three-dimensional microarchitecture of trabecular bone. *Medical Physics*, *38*(1), 420–428. 🔗 doi:10.1118/1.3528125. eprint: https://aapm.onlinelibrary.wiley.com/doi/pdf/10.1118/1.3528125

38 Arfa, I., Nouira, S., Abid, A., Alaya, N. B.-B., Zorgati, M., Malouche, D., … Romdhane, H. B. et al. (2010). Absence d'association entre les polymorphismes du système rénine angiotensine (sra) et l'hypertension artérielle chez les diabétiques de type 2 tunisiens. *la tunisie médicale*, *88*(01), 37–40.

39 Arfa, I., Nouira, S., Abid, A., Bouafif-Ben, N. A., Zorgati, M. M., Malouche, D., … Ben, H. R. et al. (2010). Lack of association between renin-angiotensin system (ras) polymorphisms and hypertension in tunisian type 2 diabetics. *La tunisie Medicale*, *88*(1), 38–41.

40 Ghouila, A., Jmel, H., Yahia, S., Malouche, D., & Abdelhak, S. (2009). Multi-som: A novel clustering approach for gene expression analysis. *9*(3), 374–374. Retrieved from 🔗 https://europepmc.org/article/med/18992849

41 Ghouila, A., Yahia, S. B., Malouche, D., Jmel, H., Laouini, D., Guerfali, F. Z., & Abdelhak, S. (2009). Application of multi-som clustering approach to macrophage gene expression analysis. *Infection, Genetics and Evolution*, *9*(3), 328–336. Retrieved from 🔗 https://doi.org/10.1016/j.meegid.2008.09.009

42 Malouche, D. (2009a). Determining full conditional independence by low-order conditioning. *Bernoulli*, *15*(4), 1179–1189. Retrieved from 🔗 https://projecteuclid.org/journals/bernoulli/volume-15/issue-4/Determining-full-conditional-independence-by-low-order-conditioning/10.3150/09-BEJ193.full

43 Malouche, D. (2009b). Mixed graphical model selection using holm's procedure. *Communications in Statistics-Theory and Methods*, *38*(9), 1453–1464. Retrieved from 🔗 https://doi.org/10.1080/03610920802455019

44 Arfa, I., Abid, A., Nouira, S., Elloumi-Zghal, H., Malouche, D., Mannai, I., … Zouari, B. et al. (2008). Lack of association between the angiotensin-converting enzyme gene (i/d) polymorphism and diabetic nephropathy in tunisian type 2 diabetic patients. *Journal of the Renin-Angiotensin-Aldosterone System*, *9*(1), 32–36. Retrieved from
🔗 https://doi.org/10.3317/jraas.2008.002

45 Kokonendji, C. C., & Malouche, D. (2008). A property of count distributions in the hinde–demétrio family. *Communications in Statistics—Theory and Methods*, *37*(12), 1823–1834. Retrieved from
🔗 https://doi.org/10.1080/03610920701809266

46 Malouche, D., & Sevestre-Ghalila, S. (2008). Estimating high dimensional faithful gaussian graphical models by low-order conditioning, 595–025. Retrieved from 🔗 http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.246.9608

47 Arfa, I., Abid, A., Malouche, D., Alaya, N. B., Azegue, T. R., Mannai, I., … Blousa-Chabchoub, S. et al. (2007). Familial aggregation and excess maternal transmission of type 2 diabetes in tunisia. *Postgraduate medical journal*, *83*(979), 348–351.

48 Letac, G., Malouche, D., & Maurer, S. (2002). The real powers of the convolution of a negative binomial distribution and a bernoulli distribution. *Proceedings of the American Mathematical Society*, *130*(7), 2107–2114. Retrieved from 🔗 https://www.ams.org/journals/proc/2002-130-07/S0002-9939-02-05352-2/

49 Letac, G., & Malouche, D. (2000). The markov chain associated to a pick function. *Probability theory and related fields*, *118*(4), 439–454. Retrieved from 🔗 https://link.springer.com/article/10.1007/PL00008750

50 Malouche, D. (1998). Natural exponential families associated to pick functions. *Test*, *7*(2), 391–412. Retrieved from 🔗 https://doi.org/10.1007/PL00008750

51 Malouche, D. (1997). L'action quadratique du groupe des homographies sur les familles exponentielles réelles. *Comptes Rendus de l'Académie des Sciences-Series I-Mathematics*, *325*(9), 1029–1032.

Preprints

1 Malouche, D. (2021b). Www.covidradar24.org, a real-time covid-19 tracker. Retrieved from 🔗 https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3900615

2 Lahmandi-Ayed, R., & Malouche, D. (2020). More investment in research and development for better education in the future? Retrieved from 🔗 https://dx.doi.org/10.2139/ssrn.3739632

3 Malouche, D., & Ben Romdhane, H. (2020). Estimating excess mortality associated with covid-19 pandemic: A 151 cross-countries study. Retrieved from 🔗 https://dx.doi.org/10.2139/ssrn.3731481

4 Jeddi, H., & Malouche, D. (2015). Wage gap between men and women in tunisia. Retrieved from 🔗 https://arxiv.org/abs/1511.02229

5 Malouche, D., Rajaratnam, B., & Rolfs, B. T. (2013). Duality in graphical models. arXiv: 1310.2641 [math.PR]. Retrieved from 🔗 https://arxiv.org/abs/1310.2641

6 Malouche, D., & Rajaratnam, B. (2009). Gaussian covariance faithful markov trees. arXiv: 0912.2407 [math.PR]. Retrieved from 🔗 https://arxiv.org/abs/0912.2407

Others

1 Malouche, D. (2021a). Un travail d'analyse statistique exige la disponibilité des données du ministère de la santé. Retrieved from 🔗 https://www.espacemanager.com/pr-dhafer-malouche-un-travail-danalyse-statistique-exige-la-disponibilite-des-donnees-du-ministere?fbclid=IwAR0rHZ6qMda1-yULkHz85ThuKFGIfF3-40-coKes8VashBYNK3VnmY4qmgk

2 Malouche, D. (2020). Quel impact de la covid-19 sur l'espérance de vie en tunisie ? Retrieved from 🔗 https://www.leaders.com.tn/article/30775-dhafer-malouche-quel-impact-de-la-covid-19-sur-l-esperance-de-vie-en-tunisie

3 Malouche, D. (2019). Arab spring success story: Tunisians vote. Retrieved from 🔗 https://archive-yaleglobal.yale.edu/content/arab-spring-success-story-tunisians-vote

4 Benstead, L., Lust, E., Malouche, D., & Wichmann, J. (2014). Tunisian elections bring hope in uncertain times. (Vol. 27, p. 2014). Retrieved from 🔗 https://www.washingtonpost.com/news/monkey-cage/wp/2014/10/27/tunisian-elections-bring-hope-in-uncertain-times/

5 Benstead, L., Lust, E., Malouche, D., Soltan, G., & Wichmann, J. (2013). Islamists aren't the obstacle. (Vol. 14). Retrieved from 🔗 https://www.foreignaffairs.com/articles/tunisia/2013-02-14/islamists-arent-obstacle

6 Benstead, L. J., Lust, E. M., Malouche, D., Soltan, G., & Wichmann, J. (2013). Winners and losers after arab spring. Retrieved from 🔗 https://archive-yaleglobal.yale.edu/content/winners-and-losers-after-arab-spring