Curriculum Vitae: Dr. Linda Smail, FHEA

#### **Contact Information:**

Dr. Linda Smail, FHEA, ABET Program Evaluator (PEV – Data Science, CSAB).

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Researcher IDs: ORCID, Scopus, Web of Science, Google Scholar, ResearchGate

QM Rubric (APPQMR) Reveiwer

Middle States Commission on Higher Education (MSCHE) Reviewer

ABET Program Reviewer

#### Personal

Birthday: April 26, 1976 Birthplace: Batna, Algeria Citizenship: French

### **Education**

B.S., Batna University, Algeria, 1998 (Mathematics, Honors)

M.S., Marne-la-Vallée University, France, 2000 (Applied Mathematics, Honors) Ph.D., Marne-la-Vallée University, France, 2004 (Applied Mathematics, Honors)

B.S., University of London, United Kingdom, 2017 (Mathematics and Economics, Honors)

## **Professional Experience**

- August 2023 Present. Professor Zayed University, Dubai, UAE.
- 2015 July 2023 Associate Professor Zayed University, Dubai, UAE.
  - 2022 2024. Computational Program Director- College of Interdisciplinary Studies
  - 2017 2019. Chair of the Mathematics and Statistics Department-College of Natural and Health Sciences.
- 2014 2015 Associate Professor in the Mathematics and Sciences Department, College of Arts and Applied Sciences (CAAS), Dhofar University, Salalah, Oman.
  - University Promotion Committee
  - Program Review Committee.
  - Arts and Applied Sciences College hiring Committee.
- 2011 2014 The American University of Iraq, Sulaimani (AUIS)
  - 2013 2014 Accreditation Steering Committee Chair
  - 2012 2014 Chair of the Mathematics and Natural Sciences Department
  - 2011 2012 Associate Professor in the Academic Program
  - 2011 2014 Director of the Math Center

- 2006 2011 New York Institute of Technology Amman, Jordan.
  - 2009 2011 Associate Professor. Colleges of Arts and Sciences & Computer Sciences.
  - 2006 2009 Assistant Professor. Colleges of Arts and Sciences & Computer Sciences.
- 2004 2005 Researcher. Department of Applied Mathematics. L.A.M.A Laboratory. Mame-La-Vallée University, France
  - 2004 "Qualified for the position of Assistant Professor", by decision of the Applied Mathematics section of the French National Council of Universities (CNU); this qualification in an acknowledgement of the scientific level for applying to a tenure in a French university.
- 2002 2004 Temporary Assistant Professor for Education and Research (ATER). Department of Applied Mathematics. University of Marne-La-Vallée, France.
- 1999 2002 Teacher Assistant. Mathematics Department. Mame-La-Vallée University, France.
- 2000 2004 PhD in Applied Mathematics. (Funded by the Algerian and French governments) University of Mame-La-Vallée, France.
  - Thesis: "Algorithmic for Bayesian networks and their extensions", under the supervision of Professor Jean-Pierre Raoult.
- 2003 2004 Assistant Researcher with INRIA (French National Institute for Research in Computer Science and Control).
  - Implementation of the Successive Restrictions Algorithm as a part of Probayes (Probabilistic computations software)
- 2002 2003 Member of a research project team: Mathematical and Technological Sciences for communication and information. In collaboration with Laplace group from INRIA.
  - Development of a Bayesian Probabilistic Calculator.
  - Development of ProBT software for Bayesian inference
- Mar. 2000 Aug. 2000 Student Researcher. Master's thesis. Mathematics Laboratory Marne-La-Vallée University, France.
- **Subject:** Bayesian Networks: Theory and Computations on Computers. Under the supervision of Professor Jean-Pierre Raoult.

#### **Refereed Articles**

- Kamalov, F., Calonge, D.S., Hultberg, P.T., **Smail, L.,** & Jamali, D.. Comparative analysis of leading artificial intelligence chatbots in the context of entrepreneurship. *J Innov Entrep* **14**, 58 (2025). https://doi.org/10.1186/s13731-025-00527-3.
- Smail, L. (2025). Quality of Life of Emirati Women with Cervical Cancer Using EORTC QLQ-30 and CX24: A First Look in the UAE. *International Journal of Environmental Research and Public Health*, 22(5), 671. <a href="https://doi.org/10.3390/ijerph22050671">https://doi.org/10.3390/ijerph22050671</a>
- Santandreu Calonge, D., Kamalov, F., Medina Aguerrebere, P., Hassock, L., **Smail, L.**, Yousef, D., Thadani, D. R., Kwong, T., & Abdulla, N. (2025). Upskilling and reskilling in the United Arab Emirates: Future-proofing careers with AI skills. Journal of Adult and Continuing Education, 0(0). <a href="https://doi.org/10.1177/14779714251315288">https://doi.org/10.1177/14779714251315288</a>

- Orak, N. H., & **Smail**, L. (2025). A Bayesian Network model to integrate blue-green and gray infrastructure systems for different urban conditions. Journal of Environmental Management, 375, 124293. https://doi.org/10.1016/j.jenyman.2025.124293
- Ferreira, A. da S. M., & **Smail, L.** (2025). Entrepreneurial intention and education among high school and technical students from federal institutes in Brazil. *Journal of Education and Work*, *37*(5–6), 420–432. https://doi.org/10.1080/13639080.2025.2456841
- Patka, M., Shahin, H., Almehairi, Al Hamedi, S., Bin Thalih, M., & **Smail, L**. Identifying Licensed Social Care Professionals in the UAE: A Foundation for Developing Psychological, Counseling, and Social Work Practices. *Int J Adv Counselling* (2025). https://doi.org/10.1007/s10447-025-09609-z
- AlBlooshi, S., **Smail, L.**, Aldayyani, A., Zeb, F., & Ibrahim, A. (2025). University students' understanding and utilization of food labels: A cross-sectional study. *International Journal of Food Science*, 2025, Article 7391826, 1–13. <a href="https://doi.org/10.1155/ijfo/7391826">https://doi.org/10.1155/ijfo/7391826</a>
- Haroun, D., Ehsanallah, A., & **Smail, L.** (2025). Motives of college students for choice of traditional food in the UAE. *British Food Journal*. <a href="https://doi.org/10.1108/BFJ-10-2024-1082">https://doi.org/10.1108/BFJ-10-2024-1082</a>
- **Smail,** L., AlAwad, M. and Abaza, W. (2024), Exploring the influence of environmental, social and individual factors on the entrepreneurial intentions of Emirati university students, *Journal of Entrepreneurship and Public Policy*, Vol. ahead-of-print No. ahead-of-print. https://doi.org/10.1108/JEPP-04-2024-0058
- Santandreu Calonge, D., **Smail, L**., & Kamalov, F. (2024). Statistically speaking, are students situationally engaged and motivated in the statistics classroom? *Journal of Applied Learning and Teaching*, 7(2). <a href="https://doi.org/10.37074/jalt.2024.7.2.37">https://doi.org/10.37074/jalt.2024.7.2.37</a>
- Kamalov, F., Zicmane, I., Safaraliev, M., **Smail, L.**, Senyuk, M., & Matrenin, P. (2024). Attention-Based Load Forecasting with Bidirectional Finetuning. *Energies*, 17(18), 4699. https://doi.org/10.3390/en17184699
- AlAwad, M., Moreira Ferreira, A., & Smail, L. (2024). Entrepreneurial Fear-of-Failure among the Emirati Youth: An Ordered Logistic Regression Estimation. World Journal of Entrepreneurship, Management and Sustainable Development (WJEMSD) V20(1), 75-89
- Hultberg, P. T., Kamalov, F., & **Smail**, L. (2024). Comparing and assessing four AI chatbots' competence in economics. Plos one, 19(5), e0297804-e0297804.
- Awawdeh, F. & **Smail, L**. (2024). High-Precision Algorithms for Fredholm Integral Equations. Advances in Mathematical Modeling and Scientific Computing. Birkhäuser Cham. https://doi.org/10.1007/9783031414190
- **Smail, L**. (2023). Variable elimination algorithm in Bayesian networks: An updated version. In AIP Conference Proceedings, 2879, 040013. <a href="https://doi.org/10.1063/12.0023972">https://doi.org/10.1063/12.0023972</a>
- Santandreu Calonge, D., Smail, L., & Kamalov, F. (2023). Enough of the chit-chat: A comparative analysis of four AI chatbots for calculus and statistics. *Journal of Applied Learning and Teaching*, 6(2). https://doi.org/10.37074/jalt.2023.6.2.22
- AlBlooshi, S.; **Smail, L**.; Albedwawi, A.; Al Wahedi, M.; AlSafi, M. (2023) The effect of COVID-19 on the academic performance of Zayed University students in the United Arab Emirates. Frontiers in Psychology, 14, art. no. 1199684.
- **Smail, L**. (2023). Human Capital and Health Education Among Menopausal Emirati Women in Dubai: Implications and Recommendations. In: Mishrif, A., Karolak, M., Mirza, C. (eds) Nationalization of Gulf Labour Markets. The Political Economy of the Middle East. Palgrave Macmillan, Singapore. <a href="https://doi.org/10.1007/978-981-19-8072-5">https://doi.org/10.1007/978-981-19-8072-5</a> 11
- Smail, L.; Jassim, G.; Khan, S.; Tirmazy, S.; Ameri, M.A. (2023) Quality of Life of Emirati Women with Breast Cancer. *Int. J. Environ. Res. Public Health*, 20, 570. https://doi.org/10.3390/ijerph20010570
- Smail L, Alawad M, Ferreira AdSM, Puga JL, García AMR-R. (2022). Determinants of Entrepreneurial Risk among Young Emiratis. *Sustainability*. 14(22):14963. https://doi.org/10.3390/su142214963

- Smail, L., Alawad, M., Abaza, W., Kamalov, F., Alawadhi, H. (2022). Modeling entrepreneurial intentions and attitudes towards business creation among Emirati students using Bayesian Networks. World Journal of Entrepreneurship, Management and Sustainable Development, V18(7). WJEMSD V18 N7 2022.
- Johnson, J. D., **Smail, L.**, Corey, D., & Jarrah, A. M. (2022). Using Bayesian networks to provide educational implications: Mobile learning and ethnomathematics to improve sustainability in mathematics education. *Sustainability (Switzerland)*, 14(10) doi:10.3390/su14105897.
- Ohoud Mohamad, O., Al Sabbah, H., Smail, L., Hermena, E., & Al Ghal, R. (2022). Food consumption frequency and perceived stress and depressive symptoms among female university students in the UAE. Frontiers in Sustainable Food Systems-Nutrition and Sustainable Diets.
   DOI: 10.3389/fsufs.2022.792631
- Gurrib, I., Kamalov, F., **Smail, L**. (2021). Bitcoin price forecasting: Linear discriminant analysis with sentiment evaluation ACM International Conference Proceeding Series, art. no. 3485561, . DOI: 10.1145/3485557.3485561
- Dghaim R, Hammami Z, Al Ghali R, **Smail L**, Haroun D. (2021). The Mineral Composition of Date Palm Fruits (*Phoenix dactylifera* L.) under Low to High Salinity Irrigation. *Molecules*. 2021; 26(23):7361. <a href="https://doi.org/10.3390/molecules26237361">https://doi.org/10.3390/molecules26237361</a>
- Al Ghali, R., **Smail, L.**, Muqbel, M. *et al.* (2021). Maternal investment, life-history trajectory of the off-spring and cardiovascular disease risk in Emirati females in the United Arab Emirates. *BMC Public Health* **21**, 1237 (2021). <a href="https://doi.org/10.1186/s12889-021-11182-0">https://doi.org/10.1186/s12889-021-11182-0</a>
- Rola Al Ghali, Carla El-Mallah, Omar Obeid, Ola El Saleh, Linda Smail, Dalia Haroun (2021).
   Urinary minerals excretion among primary schoolchildren in Dubai United Arab Emirates. PONE-D-21-12286R1
- Ali, A.M., Hendawy, A.O., Ahmad, O., Al Sabbah, H., **Smail, L.**, Kunugi, H. (2021). The arabic version of the cohen perceived stress scale: Factorial validity and measurement invariance. Brain Sciences, 11 (4), art. no. 419, DOI: 10.3390/brainsci11040419
- F. Kamalov, L. Smail and I. Gurrib. (2020). Forecasting with Deep Learning: S&P 500 index. *13th International Symposium on Computational Intelligence and Design (ISCID)*, Hangzhou, China, 2020, pp. 422-425, doi: 10.1109/ISCID51228.2020.00102.
- F. Kamalov, L. Smail and I. Gurrib. (2020). Stock price forecast with deep learning. *International Conference on Decision Aid Sciences and Application (DASA)*, Sakheer, Bahrain, 2020, pp. 1098-1102, doi: 10.1109/DASA51403.2020.9317260.
- Ali AM, Ahmed AH, **Smail L**. (2020). Psychological Climacteric Symptoms and Attitudes toward Menopause among Emirati Women. *International Journal of Environmental Research and Public Health*. 2020; 17(14):5028.
- **Smail L**, Jassim GA, Sharaf KI. (2020). Emirati Women's Knowledge about the Menopause and Menopausal Hormone Therapy. *International Journal of Environmental Research and Public Health*. 2020; 17(13):4875.
- **Smail L**, Jassim G, Shakil A. (2020). Menopause-Specific Quality of Life among Emirati Women. *International Journal of Environmental Research and Public Health*. 2020; 17(1):40.
- Awawdeh, F., & **Smail, L**. (2020). Convergence analysis of a highly accurate Nyström scheme for Fredholm integral equations. *Applied Numerical Mathematics*. 152 (2020) 231–242. https://doi.org/10.1016/J.APNUM.2019.12.005
- **Smail, L.**, Ghufran A. Jassim, Qasim M. Al-Shboul, and Afaaf Saeed Hattawi. (2019) Emirati Women's Attitudes Towards the Menopause: Implications for Health-Care Policy. Post Reproductive Health. June;25(2):71-79. doi: 10.1177/2053369119848888.
- Silvera, G. & Smail, L. (2019). Relationships between teamwork and suicidal behavior in Juvenile detention facilities using Bayesian networks, Cogent Social Sciences, 5:1, DOI: 10.1080/23311886.2019.1652984
- **Smail, L.** (2018). Junction trees construction: Application to Bayesian networks. AIP Conference Proceedings 2025, 100007; <a href="https://doi.org/10.1063/1.5064936">https://doi.org/10.1063/1.5064936</a>.

- **Smail, L.** (2018). Bayesian network model for temperature forecasting in Dubai. AIP Conference Proceedings 2025, 100006; <a href="https://doi.org/10.1063/1.5064935">https://doi.org/10.1063/1.5064935</a>.
- **Smail, L.**, & Silvera, G. (2018). American Universities in the Middle East: A Student's Perspective. *Cogent Education*, *5*(1) doi:10.1080/2331186X.2018.1447228.
- Smail L., Azouz, Z. (2017). Factorization of Computations in Bayesian Networks: Interpretation of Factors. In: Abualrub, T., Jarrah, A., Kallel, S., Sulieman, H. (eds) Mathematics Across Contemporary Sciences. AUS-ICMS 2015. Springer Proceedings in Mathematics & Statistics, vol 190. Springer, Cham. https://doi.org/10.1007/978-3-319-46310-0 13
- **Smail, L**. (2017). Using Bayesian Networks to Understand Relationships among Math Anxiety, Genders, Personality Types, and Study Habits at A University in Jordan. *Journal on Mathematics Education, Volume 8 (1)*, pages: 17-34, doi: <a href="http://dx.doi.org/10.22342/jme.8.1.3405.17-34">http://dx.doi.org/10.22342/jme.8.1.3405.17-34</a>.
- **Smail, L.** (2017). Junction Tree constructions in Bayesian Networks. Journal of Physics.: Conference Series. Volume 893 012056. http://iopscience.iop.org/article/10.1088/1742-6596/893/1/012056/meta
- **Smail, L.** (2016). Comparison of Lauritzen-Spiegelhalter and Successive Restrictions Algorithms for Computing Probability Distributions in Bayesian Networks. AIP Publishing., doi: 10.1063/1.4952522.
- Silvera, G. & Smail, L. (2016). Using Bayesian Networks to Understand Representative Bureaucracy in Juvenile Detention Facilities. International Journal of Business and Public Administration.
- **Smail, L**. Uniqueness of the Level Two Bayesian Network Representing a Probability Distribution, International Journal of Mathematics and Mathematical Sciences. Volume 2011 (2011), Article ID 845398, doi:10.1155/2011/845398.
- **Smail, L.** (2009). D-Separation and Level Two Bayesian Networks. Artificial Intelligence Review, 31., doi: 1007/s10462-009-9128-3.
- Mekhnacha, K., Ahuactzin, J., Bessière, P., Mazer, E., & Smail, L. (2007). Exact and approximate inference in ProBT. Revue d'Intelligence Artificielle, Lavoisier, 21 (3).
- Smail, L. & Jaafar, R. (2007). The Relationship between Students' Personality Types and Their Success. Scientific Journals International, 1 (2).
- **Smail, L.** & Raoult, J. (2005). Successive Restrictions Algorithm in Bayesian Networks. Advances in Intelligent Data Analysis VI, 3646., doi: 10.1007/11552253 37.
- **Smail, L**. & Raoult, J.P. Successive Restrictions Algorithm in Bayesian Networks. A.F. Famili et al. (Eds): IDA 2005, LNCS 3646, pp 409-418, 2005. Springer-Verlag Berlin Heidelberg 2005.
- **Smail,** L. & Raoult, J.P. Réseaux Bayésiens de Niveau Deux et D-Séparation. Revue des Nouvelles Technologies de l'Information (RNTI). Novembre 2005. Cépaduès Editions. France.

#### **Book**

- Fortney, J. P., & Smail, L. (2025). Calculus for Business, Economics, and the Social and Life Sciences. Chapman and Hall/CRC. https://doi.org/10.1201/9781003480235
- Smail, L. (2012). Algorithmique pour les Réseaux Bayésiens et leurs Extensions Editions universitaires europeennes.

# **Book-Chapters**

- **Smail, L**. (2023). Human Capital and Health Education Among Menopausal Emirati Women in Dubai: Implications and Recommendations. In: Mishrif, A., Karolak, M., Mirza, C. (eds) Nationalization of Gulf Labour Markets. The Political Economy of the Middle East. Palgrave Macmillan, Singapore. <a href="https://doi.org/10.1007/978-981-19-8072-5">https://doi.org/10.1007/978-981-19-8072-5</a> 11
- **Smail, L.** & Azouz, Z. (2017). Factorization of Computations in Bayesian Networks: Interpretations of factors. In Abualrub, T., Jarrah, A. S., Kallel, S., & Sulieman, H. (Eds.). (2017). *Mathematics across contemporary sciences: AUS-ICMS, Sharjah, UAE, April 2015*. Springer. https://doi.org/10.1007/978-3-319-46310-0

#### **Books-Editor**

- Patel, R., Patel, N., Smail, L., Kamboj, P., & Soni, M. (Eds.). (2023). Intelligent Green Communication Network for Internet of Things (1st ed.). CRC Press. https://doi.org/10.1201/9781003371526
- AL- Dahoud, A., Salameh, W., & Smail, L. Intelligent Communication Systems. Canada. (2010). Ubiquitous Computing and Communication Journal (UBICC).

#### **Articles Under Review**

- **Linda Smail.** The Role of Parents' Education Levels and Occupations on their Daughters' Entrepreneurial Intentions.
- F. Kamalov, D. S. Calonge, **L. Smail**, D. Azizov, D. R. Thadani, T. Kwong, and A. Atif, "Evolution of ai in education: Agentic workflows," arXiv preprint arXiv:2504.20082, 2025.
- Kamalov, F., Santandreu Calonge, D., **Smail, L.,** Azizov, D., Thadani, D. R., Kwong, T., & Atif, A. (2025). Evolution of AI in education: Agentic workflows. *Sustainability*. MDPI.
- **Linda Smail,** David Santandreu, Firuz Kamalov. (2025). Can Large Language Models Bridge the Gap in Environmental Knowledge? Environmental Education Research. ID: 247980001
- David Santandreu, **Linda Smail**, Firuz Kamalov. (2025). Opportunities, Challenges, and Value Creation of an AI Ecosystem in the United Arab Emirates. submitted to Frontiers in Artificial Intelligence, section AI in Business. ID: 1426425
- Firuz Kamalov, David Santandreu, Patrik T. Hultberg, **Linda Smail**, Dima Jamali. (2025). Comparative Analysis of Leading Artificial Intelligence Chatbots in the Context of Entrepreneurship.

## **Refereed Conference Proceedings**

- **Smail,** L. (2024). Bayesian Network Modeling for Strategic Blue, Green, and Gray Infrastructure Planning. World Biodiversity Forum 2024. Davos, 16-21 June 2024.
- **Smail,** L. (2023). Entrepreneurial Fear-of-Failure among the Emirati Youth: An Ordered logistic Regression Estimation. Second Conference: Economic Policy and Research in the UAE and Beyond, AUS Sharjah, AUE, March 23rd, 2023.
- **Smail, L**. (2022). Variable Elimination Algorithm in Bayesian Networks: An Updated Version. AIP Conference Proceedings 2483, 010002 (2022); https://doi.org/10.1063/12.0014956.
- **Smail**, L, et al. (2022). Learning a Bayesian structure to model entrepreneurial intentions and attitudes toward business creation among Emirati students. Economic Research Forum (ERF), Working PaperNo. 1583. September 2022.
- Gurrib, K, Kamalov, F, and **Smail, L**. (2021). Bitcoin Price Forecasting: Linear Discriminant Analysis with Sentiment Evaluation. In The 7th Annual International Conference on Arab Women in Computing in conjunction with the 2nd Forum of Women in Research (ArabWIC 2021). Association for Computing Machinery, New York, NY, USA, Article 4, 1–5. https://doi.org/10.1145/3485557.3485561
- **Smail, L. (2021)** Human Capital and Health Education among Menopausal Emirati women in Dubai: Implications and Recommendations. Nationalization of GCC Labor Markets: The Changing Role of Higher Education in the Era of the 4th Industrial Revolution Workshop. Gulf Research Meeting 2021.
- F. Kamalov, **L. Smail** and I. Gurrib. (2020). Forecasting with Deep Learning: S&P 500 index. In 13<sup>th</sup> International Symposium on Computational Intelligence and Design (ISCID) (pp. 422-425). IEEE. <a href="https://doi.org/10.1109/ISCID51228.2020.00102">https://doi.org/10.1109/ISCID51228.2020.00102</a>
- F. Kamalov, **Smail, L** and I. Gurrib. (2020). Stock price forecast with deep learning. In 2020 International Conference on Decision Aid Sciences and Application (DASA), pp. 1098-1102, doi: 10.1109/DASA51403.2020.9317260.

- **Smail, L**. (2018). Junction trees construction: Application to Bayesian networks. AIP Conference Proceedings 2025, 100007 (2018) <a href="https://doi.org/10.1063/1.5064936">https://doi.org/10.1063/1.5064936</a>
- **Smail, L.** (2018). Bayesian network model for temperature forecasting in Dubai. AIP Conference Proceedings 2025, 100006; https://doi.org/10.1063/1.5064935.
- **Smail, L**. (2017). Junction Trees Constructions in Bayesian Networks. Journal of Physics: Conference Series, IOP Publishing, vol. 893, no. 1, pp. 012056. doi:10.1088/1742-6596/893/1/012056
- Smail, L. (2016). Comparison of Lauritzen-Spiegelhalter and Successive Restrictions Algorithms for Computing Probability Distributions in Bayesian Networks. AIP Publishing., doi: 10.1063/1.4952522.
- Smail, L. (2012). Multi-target probability distributions computations in Bayesian. the Fourth International Conference on Mathematical Sciences. ICM 2012. Tome I. Pages 351-363. UAE University.
- **Smail, L.** (2010). Inference in Bayesian Networks using D-Separation. The first International Conference on Mathematics and Statistics AUS-ICM 2010.
- **Linda Smail,** D-Separation and Bayesian Networks of Level Two. Colloque sur l'Optimisation et les Systèmes d'Information. COSI'07. Oran, Algérie 2007
- **Linda Smail** et Jean-Pierre Raoult. Réseaux Bayésiens de Niveau Deux et D-Séparation. Proceedings of EGC'2005, Paris, France, 19-21 January 2005
- **Linda Smail**. Successive Restrictions Algorithm. Proceedings of the Fourth International Conference on Mathematical Methods on Reliability, Santa Fe, USA, 21-25 June 2004
- **Linda Smail**. D-Séparation et calcul de lois dans les réseaux Bayésiens. Proceedings of XXXVIèmes Journées de Statistique, Montpellier, France 24-28 May 2004
- **Linda Smail.** Calcul de lois conditionnelles dans les réseaux Bayésiens. Proceedings of XXXVèmes Journées de Statistique, Lyon, France 2-6 juin 2003
- Linda Smail et Jean-Pierre Raoult. Algorithme des restrictions successives. Proceedings of QUALITA 2003. Nancy, France 18-20 March 2003.

#### **Lectures and Seminars:**

- Decision Under Uncertainty. Data Sciences Workshop. The American University of Sharjah. May 6<sup>th</sup>, 2023.
- Algorithmic for Bayesian Networks and Their Extensions. Second workshop on PDE's and Applications. Sharjah University, February 11<sup>th</sup>, 2023.
- Variable Elimination Algorithm in Bayesian Networks: An Updated Version. International Conference of Mathematical Sciences. Maltepe University, July 20-24 Istanbul, Turkey.
- Bayesian Networks: A new Era. Theory & Applications. University of Education, LAHORE. VEHARI Campus, Pakistan. February 24, 2022
- Quality of life research in medicine and health sciences (by a Statistician to non-Statisticians). Annual Informative Meeting: Quality of Life. A. Menarini Middle East & Africa. May 28, 2022. Dubai, UAE
- Learning a Bayesian structure to model entrepreneurial intentions and attitudes toward business creation among Emirati students. The 28<sup>th</sup> Economic Research Forum 9ERF) Annual Conference March 24–30, 2022.
- Learning a Bayesian structure to model entrepreneurial intentions and attitudes towards business creation among Emirati Youth. Economic Policy and Research in the UAE and Beyond Conference, NUY Abu Dhabi, UAE. March 23rd, 2022.
- Human Capital and Health Education among Menopausal Emirati women in Dubai: Implications and Recommendations. Nationalization of GCC Labor Markets: The Changing Role of Higher Education in the Era of the 4th Industrial Revolution Workshop. Gulf Research Meeting 2021.
- Bayesian Networks: Theory and Applications. International Women in Mathematics. International Mathematical Union. Sorbonne University, Abu-Dhabi, UAE, 7 June 2021.

- Bitcoin Price Forecasting: Linear Discriminant Analysis with Sentiment Evaluation. ArabWIC 2021: ArabWIC 7th International Conference on Arab Women in Computing. August 2021, Sharjah, UAE.
- Modelling entrepreneurial intentions and attitudes towards business creation among Emirati students using Bayesian Networks. The 9<sup>th</sup> Annual BayesiaLab Conference. Laval Virtual World. October 11– 15, 2021
- Stock price forecast with deep learning. 2020 International Conference on Decision Aid Sciences and Application (DASA).
- Forecasting with Deep Learning: S&P 500 index. 2020 13th International Symposium on Computational Intelligence and Design.
- Variables Elimination Algorithm: an Updated Version. 9<sup>th</sup> International Congress on Industrial and Applied Mathematics (ICIAM'19), Valencia, Spain.
- Junction trees construction: Application to Bayesian networks. 10<sup>th</sup> International Conference for Promoting the Application of Mathematics in Technical and Natural Sciences (AMiTaNS'18), Albena, Bulgaria.
- Comparison of Lauritzen-Spiegelhalter and Successive Restrictions Algorithms for Computing Probability Distributions in Bayesian Networks. The Second International Conference on Mathematical Science and Statistics (ICMSS'2016), Kuala Lumpur, Malaysia.
- Inference in Bayesian networks. The Fourth International Conference on Mathematical Science and Its Applications (ADU-ICMSA '15), Abu Dhabi University. United Arab Emirates.
- Factorization of Computations in Bayesian Networks. The Second International Conference on Mathematics and Statistics (AUS-ICMS '15), American University of Sharjah. United Arab Emirates.
- Multi-target Joint Probability Distributions Computations in Bayesian Networks. The Fourth International Conference on Mathematical Sciences, ICM 2012, United Arab Emirates.
- Level two Bayesian Networks. The German Jordan University, May 2010
- Bayesian Networks for decision making. The NYIT Management and Marketing Graduate students. 2009-2010
- Bayesian Networks and Their Applications. Faculty Development Workshop NYIT, 2008
- The Relationship between Students' Personality Types and their Success. Faculty Development Center Workshop. NYIT, Amman, Jordan November 15th 2007.
- D-Separation in Graphical Models. INRIA, Grenoble, France 2005.
- Bayesian Networks and Inference. MathStic Project, INRIA Grenoble, France 2004
- Lauritzen and Spiegelhalter algorithm. Marne-La-Vallée University, France 2004
- D-Separation and Bayesian network of level two. Marne-La-Vallée University, France 2004
- The Running Intersection Property in Bayesian networks. Marne-La-Vallée University, France 2003
- Bayesian networks and their applications. Marne-La-Vallée University, France 2003
- Successive Restrictions Algorithm. Marne-La-Vallée University, France 2002
- Computation of probabilities in Bayesian networks. Conference of young probabilistic and statisticians researchers, Aussois, France 2002

# **Students Supervision:**

## 1. Bachelor Students - Senior Projects:

- Shamsa Abdulrahman Humood Nasser Alshuhoomi (2025)
- Latifa Musabbah Obaid Almutawa Alqaydi (2025)
- MD SOHAZUR ISLAM SOZIB (2025)
- Khawla Sharaf. (2020)
- Anam Shakil (2020)
- Afaaf Saeed Hattawi (2019)
- Ohoud Mohamed (2019)

#### 2. Master Students:

- Fatima Ahmed Nasser-Advisory committee member, Zayed University (2024).
- Lekha Athota. Co-Supervisor. Heriot-Watt University (2023).

#### Awards:

- 1. Research Incentive Award (ZU). Quality of life of Emirati Women with Cervical Cancer. 2024.
- 2. Zayed University Faculty Excellent Award 2023
- 3. Research Incentive Award (ZU). Quality of life of Emirati Women with Breast Cancer. 2022.
- 4. Research Incentive Award (ZU). Entrepreneurial Intentions Among Emirati Youth. 2022.
- 5. One of the top five award-winning papers (out of 138 submissions). The 28<sup>th</sup> Economic Research Forum(ERF28) Annual Conference. 2022.
- 6. 1<sup>st</sup> position- (Category-Technology) in the 2<sup>nd</sup> Forum for Women in Research (QUWA): Empowering Women in Research & Innovation, Sharjah University. 2021. Also, shortlisted in the 3<sup>rd</sup> Forum.
- 7. 2<sup>nd</sup> position (Category-Public Health) in the 7<sup>th</sup> Undergraduate Research Competition Office of Research & Sponsored Programs, Abu Dhabi University. 2019.
- 8. Research Incentive Award (ZU). Emirati Women's Attitudes towards Menopause: Implications forHealth-Care Policy. 2019
- 9. Zayed University Faculty Exceed Expectation Award. 2018

#### Grants

Internal Research Funded Projects

Grant	PI & Co-PIs	Duration	Project	Amount
Research Incentive	PI: Linda Smail	December	Quality of life of Emirati	
Fund (RIF)	Co-PIs: Jassim,	2022	Women with Cervical	228,000
	G.& Dawoud, E.	- December 2024	Cancer	AED
Short-Term Grant		December	The Role of Parents	
(R22089)	PI: Linda Smail	2022 -	Education	7600 AED
		June 2023	Levels and Occupations on	
			their Daughters	
			Entrepreneurial	
			Intentions.	
Research	PI: Linda Smail	December	Quality of life of Emirati	
Incentive Fund	Co-PIs: Jassim,	2019	Women with Breast Cancer	189,260
(RIF) R19074	G., Tirmazy, S.,	- June 2022		AED
	& AlAmeri, M.			
			An innovative approach to	
Research				299, 630
Incentive Fund	Johnson Co-PI:		consider a Stem career	AED
(RIF) R19067	Linda Smail	- June 2022	using Ethnomathematics	
			and a	
			tablet device	
Short-Term Grant	PI: Linda Smail		Entrepreneurship attitudes	5000 AED
(STG066)			and intention among	

		September 2020	Emirati Students	
Research Incentive Fund (RIF) R19074	Shboul, Q.,&	2017 - December	L	134,299 AED
Start-up Grant (R16027)	PI: Linda Smail		Weather forecasting in the UAE using Bayesian Networks	7000 AED

External Research Funded Projects

Funding Source	Collaborators		Project	Amount (AED)
Dubain Foundation	PI: Linda Smail	February 2025- January 2027	Advanced Bayesian Networks for the Classification of Quranic Qira'at	460,000
Sandooq-AlWatan	PI: Riad Beyoumi	2022 - 2024	Diabetes Precision Medicine: Subtyping of Diabetes by genomics and clinical biomarkers to personalize patient care	800,000
MBRU- ALMAHMEED	PI: Riad Beyoumi	2020 - 2022	Would the sub type 2 diabetes segregates into distinct disease entities enabling better clinical Utility?	300,000
MBRU- ALMAHMEED	PI: Riad Beyoumi	2020 - 2022	A proof of principle that type 2 diabetes (T2D) can be subtyped, using genomic biomarkers, pathophysiological drivers and artificial intelligence among Dubai residents	200,000
Dubai Police	PI: Linda Smail	2020	Challenges and obstacles facing the police force. Bayesian networks approach	24000
Ministry of Environment, Forest and Climate Change	PI: Linda Smail/ MOEFCC	2019	UAE Green Economy Index and State of Green Economy Report	153,846
Ministry of Economy (MOE)	PI: Linda Smail/MOE	2017	The Wellbeing Youth Index	20,000

# **Grant Reviewer:**

- Oman Research Council

- iGrants Qatar University

#### Journal and Conference Reviewer:

- International Journal of Environmental Research and Public Health (MDPI, Q1)
- Mathematics (MDPI, Q!)
- Sustainability (MDPI, Q1)
- Women's Health Issues. (Elsevier, Q1)
- Journal of Psychosomatic Obstetrics and Gynecology (Taylor & Francis, Q1).
- Journal on Mathematics Education. (Sriwijaya University, Q1)
- Mathematical Methods in the Applied Sciences. (Wiley, Q1).
- International Journal of Approximate Reasoning. (Elsevier, Q1)
- Applied Meteorology and Climatology (American Meteorological Society, Q2).
- Health and Technology Journal. (Springer Nature, Q3)
- Learning and Teaching in Higher Education: Gulf Perspectives Journal (Emerald Publishing, Q4)
- British Journal of Mathematics & Computer Science. (SCIENCEDOMAIN international)
- International Journal of Sexual and Reproductive Health Care (Peertechz).
- International Conference on Recent Developments in Mathematics ICRDM2022.
- International Conference of Mathematical Sciences, ICMS. Conference on Neural Information Processing Systems, NeurIPS 2021.
- International Conference on Machine Learning, ICML 2019-present
- International Conference on Learning Representations, ICLR.
- Advanced Methodologies for Bayesian Networks, AMBN Japan 2017.

#### **Memberships**

# **Professional Memberships:**

- Editorial Board: Gulf Journal of Mathematics
- Editorial Board: Annals of Mathematics and Computer Science
- IEEE member
- IEEE Computational Intelligence Society member
- IEEE Mathematical Foundations of Computing, IEEE Computer Society Technical Community
- Member of the ACM: Association for Computing Machinery
- Member of the AMS: American Mathematical Society
- Member of the SIAM: Society for Industrial and Applied Mathematics
- Editorial Board member UBICC: Special Book Issue: Intelligent Communication System
- Member of the Organizing and Technical Committees of ICICS '09
- Member of the Program Committee of ICADIWT'09
- Member of the program committee: EGC'2005 Paris, France.

## **Honorary Memberships:**

- President of the Math Club, AUIS
- President to the Math Club, NYIT
- President to the French Club, NYIT
- Honorary member of the LAMA Lab, France

- Honorary member of INRIA, France

#### **Certificates and Courses**

- Quantitative Text Analysis for Social Sciences theoretical and practical applications Dr. Luwei Ying and to American Political Science Association.
- MLAS Summer School 2022.
- Good Clinical Practice (GCP) Certificate. The National Institute on Drug Abuse (NIDA) Center for Clinical Trials (CCTN) Clinical Trials Network (CTN). 2020
- Nigel Carrington Collaborative Institutional Training Initiative (CITI PROGRAM). 2020
- Artificial Intelligence Analyst Mastery Award 2019. Issuer: IBM October 6, 2019.
- Fellow of The Higher Education Academy in recognition of attainment against the UK Professional Standards Framework for teaching and learning support in higher education. Recognition reference: PR159044. Date of recognition: 20/12/2018
- Common Core in Action: Math Classroom Challenges- Using Formative Assessment to Guide Instruction by New Teacher Center on Coursera. Certificate earned on December 2, 2013
- Linear and Integer Programming. With distinction. <u>University of Colorado Boulder</u>, Coursera.
- <u>The Power of Macroeconomics: Economic Principles in the Real World.</u> With distinction. <u>University of California, Irvine, Coursera.</u>
- <u>The Power of Microeconomics: Economic Principles in the Real World.</u> With distinction. <u>University of California, Irvine, Coursera.</u>
- Introduction to Economics. University of London. Academic year 2013-2014.
- Macroeconomics. University of London. Academic year 2014-2015.
- Microeconomics. University of London. Academic year 2015-2016
- Econometrics. University of London. Academic year 2015-2016

Languages English, French, Arabic, Basic Italian.

## **Computer Skills**

- System of exploitation: Unix/Linux, Windows, MacOs
- Languages of programming: C and C++, Python, R.
- Specialized software: SPSS, STATA, Latex, Matlab, Maple, Mathematica, QM-POM, Netica, BNT, Hugin, BayesiaLab.