

Nazar Mustafa Siedahmed
College of Information Tech. - (CIT)
Professor

Cycle : 2021-2023

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Chair Grade	Excellent
Committee Grade	Excellent
Dean Grade	Excellent

Work Plan

Teaching

- Interaction with students and encouraging them to develop their skills and enhance their self-learning capabilities.
- Create a micro-credential course (CSBP411)
- Revise and improve the CSBP431 (Bioinformatics course – including replacing the Perl programming language with Python).
- Develop courses plans and outcomes if needed (MS in Data Science and Machine Learning, BS in Data Science).
- Prepare appropriate examinations, development of effective student evaluation tools to support course objectives and to achieve course goals, and grade distribution curve.
- Use and development of modern teaching methods (mainly Blackboard).
- Teach diverse courses.
- Supervise hands-on training, senior graduation projects.
- Contribute to the development of academic programs such as MS in Data Science and Machine Learning, BS in Data Science program.
- Publish education-related paper.

Resources

Grant related to the educational project.

Research

- Publish at least 3 journal papers.
- Publish in 10% top journals.
- Apply for research grants (PI and Co-PI).
- Present 2 papers in international indexed research conferences.
- Continue to supervise Ph.D. students.

Resources

- Financial support to attend/present at international conferences
- Journal publication fee

Services

- Continue serving as a director of the Big Data Analytics Center.
- Be a member of major committees in the college such as the Promotion Committee.
- Participate in activities of national, regional, or international professional organizations/associations committees.
- Contribute to the planning and/or delivery of continuous professional development activities for faculty
- Participate in peer evaluations for academic purposes (if assigned)
- Contribute to student's advising and counseling activities
- Contribute to the selection, development of orientation programs, and offering other supportive services for new students.
- Contribute to organization of professional workshops and/or training programs off-campus
- Be a member of editorial/advisory boards of academically refereed publications, such as scientific journals, periodicals, and magazines (if invited).
- Referee research papers submitted for publication in scientific periodicals or conference proceedings.

Resources

NA

Plan Review and Approval

Plan is approved by Department Chair

Interim Achievements and Review**Achievements in Teaching**

- By the end of Fall 2022, I will complete teaching 5 diverse courses (CSBP320, CSBP431, ITBP480, ISBP632, and CSBP411).
- My Student Evaluation of Teaching (SET) for the only CSBP431 (Bioinformatics) I taught (6 hours release) in Fall 2021 is 4.54 which is higher than the department average (4.09), the College average (4.41), and the university average (4.42).
- I am redesigning the CSBP411 – Machine Learning course to eliminate the overlap with the CSBP320 – Data Mining. This is besides considering Python language to perform ML.
- Create a micro-credential course (CSBP411).
- I have revised and improved the CSBP431 (Bioinformatics course – including replacing the Perl programming language with Python).
- Completed a Senior graduation project.
- Published 2 education-related journal papers:
 - B. Al Breiki, T. Habuza, Z. Shuqfa, MA. Serhani, N. Zaki, S. Harous (2021) Customized Rule-Based Model to Identify At-risk Students and Propose Rational Remedial Actions. Big Data and Cognitive Computing. (Q2)
 - B. AlBreiki, N. Zaki*, and H. Al Ashwal. (2021) A Systematic Literature Review of Student Performance Prediction Using Machine Learning Techniques. Educ. Sci. 2021, 11(9), 552. (Q2)
- Evaluated a Ph.D. level ML course proposed by the College of Engineering
- A grant related to teaching will be submitted soon.

Achievements in Research

Publications:

Published 10 journal papers, 8 of them are in Q1, besides 1 Scopus indexed conference paper:

Journals

1. T Habuza, N Zaki, EA Mohamed, Y Statsenko (2022) Deviation From Model of Normal Aging in Alzheimer's disease: Application of Deep Learning to Structural MRI data and Cognitive Tests. IEEE Access. (Q1)
2. Q. Khan, E. Kalbus, N. Zaki, and M.M Mohamed (2022) Utilization of Social Media in Floods Assessment using Data Mining Techniques. PLOS ONE. (Q1)
3. H. AlDarmaki, S. Ram, Asad Ullah, and N. Zaki (2022) Unsupervised Automatic Speech Recognition: A Review. Speech Communication. (Q1)
4. F. Al Zahmi, Y. Statsenko, T. Habuza, R. Awawdeh, H. Elshekhali, M. Lee, N. Salamin, R. Sajid, D. Kiran, S. Nihalani, D. Smetanina, K. Neidl-Van Gorkom, N. Zaki, and T. Loney (Accepted) Ethnicity-specific features of COVID-19 among Arabs, Africans, South Asians, East Asians and Caucasians in the UAE. Frontiers in Cellular and Infection Microbiology. (Q1)
5. Y. Statsenko¹, T. Habuza, D. Smetanina, G. Simiyu, L.n Uzianbaeva, K. Gorkom, N. Zaki, et al. Brain morphometry and cognitive performance in normal brain aging: age- and sex-related structural and functional changes. Frontiers in Aging Neuroscience (Q1).
6. Balqis Al Breiki, Tetiana Habuza, Zaid Shuqfa, Mohamed Adel Serhani, Nazar Zaki, Saad Harous (2021) Customized Rule-Based Model to Identify At-risk Students and Propose Rational Remedial Actions. Big Data and Cognitive Computing. (Q2)

7. Yauhen Statsenko, Tetiana Habuza, Klaus Neidl-Van Gorkom, Nazar Zaki, et al. (2021) Proportional changes in cognitive subdomains during normal brain aging. *Frontiers in Aging Neuroscience*. (Q1)
8. N. Zaki, H. Singh and E. A. Mohamed (2021) Identifying Protein Complexes in Protein-Protein Interaction Data Using Graph Convolutional Network," in *IEEE Access*, vol. 9, pp. 123717-123726, 2021, DOI: 10.1109/ACCESS.2021.3110845. (Q1)
9. Tetiana Habuza, Alramzana Nujum Navaz, Faiza Hashim, Fady Alnajjar, Nazar Zaki, et al. (2021) AI applications in robotics, precision medicine, and medical image analysis: an overview and future trends. *Informatics in Medicine Unlocked* (Q3), Vol. 24, 100596.
10. Y. Statsenko, Tetiana Habuza, I. Charykova, KN. Gorkom, N. Zaki, et al. (2021) Predicting age from behavioral test performance for screening early onset of cognitive decline. *Frontiers in Aging Neuroscience*. (Q1).

Conference Papers:

1. W. Khan and N. Zaki (2022) COVID-19 Detection from Chest X-ray using Deep Learning Ensemble Classifier. *International Conference on Data Intelligence and Cognitive Informatics (ICDICI 2021)*. *Data Intelligence and Cognitive Informatics* pp 429-441.

Grants:

- Biotechnology VRI, Co-PI, 70 million Dirham, funded by ASPIRE, 2022-2027.
- Using Machine Learning and Satellite Data to Guide Poverty Reduction, PI, 37,000, UAEU, 2021-2022
- Intelligent Clustered Body Language Analysis of Healthcare Patients, Co-PI, 713,000, UAEU, 2022-2026.

Supervision:

PhD

- Tetiana Habuza, (Main advisor), CIT, to defend her thesis defense June 6th, 2022.
- Balqis Al Braiki, (Main advisor), CIT, defended her proposal in Fall 2021.
- Wasif Khan, (Main advisor), CIT, to defend his proposal in Summer 2022.
- Bernadette Michel Fakhry Guirguis, (Advisory Committee Member), College of Education, defended her proposal in Fall 2021.
- Mustapha Mbye, (Advisory Committee Member), College of Agriculture & Veterinary Medicine (CAVM), Defended his thesis.

MSc.

- Wala Suliman Mohamed, (Main advisor), CIT, to defend her dissertation on June 10th, 2022.
- Ahmed Elsayed (Co-advisor), College of Engineering, defended his dissertation in Spring 2022.

Achievements in Services

- Continue to serve as a director of the Big Data Analytics Center.
- 2018- Date, Chair, UAEU Receipt of goods, materials, and services committee

- 2019- Date, Member, UAEU Taskforce (COVID-19)
- Internship advisor: (2 in Fall 2021 and 4 in Spring 2022).
- Associate editor: Engineering Applications of Artificial Intelligence (IF 6.212) and IEEE Access (IF 3.367)
- Spring 2022, Member of the ABET task-force
- Student's advising and counseling activities: advise more than 15 students every semester.
- Invited Talk: AI in academia: Future Prospective, College of Education, UAEU, Feb 3rd, 2022. (<https://bidac-uaeu.github.io/work-shop-2.html>)
- Organized a training program for students off-campus (Expo 2020), Machine Learning for all, Expo 2020, Feb 21-23, 2022.
- Conduct examination proctoring and examine several senior graduation projects.

Faculty Member Proposed Changes

No input is provided

Self-Study

Teaching

Teaching

1. Student evaluations for courses taught for each semester:

- Based on the SET results, my average rating across all courses taught was 4.65. This exceeds the average rating of 4.53 for all instructors at the CIT, as well as the average rating of 4.51 for instructors at UAEU. This indicates that my teaching approach has been successful in engaging students and helping them learn.

Term	Course	My Average	CIT Average	UAEU Average
SP 2021	CSBP320	4.46	4.44	4.44
FA 2021	CSBP431	4.54	4.49	4.5
SP 2022	CSBP320	4.69	4.48	4.52
FA 2022	ISBP632	4.74	4.61	4.54
FA 2022	CSBP431	4.82	4.61	4.54

2. Interaction with students and encouraging them to develop their skills and enhance their self-learning capabilities:

- Under the “student engagement” item extracted from the SET reports, the resulting average rating for all courses taught was 4.59, which surpasses both the CIT and UAEU averages of 4.53 and 4.51, respectively. These results suggest that my approach to teaching effectively involves and motivates students.

My Average CIT Average UAEU Average

4.18 4.47 4.45
4.75 4.49 4.5
4.57 4.5 4.52
4.63 4.6 4.55
4.83 4.6 4.55
4.59 4.53 4.51

3. Methodology and documentation of the teaching process, including the development of course plans and the achievement of course outcomes (ePortfolio-Methodology):

- During the teaching process, I devoted time and effort to developing comprehensive course plans that aligned with the program's objectives and course outcomes. These course plans incorporated various teaching strategies, including interactive lectures, group activities, projects, presentations, and hands-on assignments, to ensure student engagement and facilitate their learning experience. Through the use of formative and summative assessments, I was able to regularly monitor student progress and adjust the course content and methodology as needed. My focus on meticulous documentation of the teaching process allowed me to consistently achieve the desired course outcomes and effectively prepare students for future academic and professional pursuits. Please refer to Blackboard for more details.

4. Preparation of appropriate examinations, development of effective Student evaluation tools to support course objectives and to achieve course goals, and grade distribution curve (ePortfolio-Student assessment):

- By preparing appropriate examinations, I have created an assessment framework that accurately measures my students' understanding of course material. Additionally, the development of effective student evaluation tools demonstrates a commitment to improving the learning experience for students and ensuring that they are able to meet the course objectives. Please refer to Blackboard for more details.

5. Use and development of modern teaching methods (e.g. integration of active and cooperative learning into courses) and techniques (e.g. use of computers and computer programs):

- In the last two years I have primarily focused on courses related to machine learning, data mining, and bioinformatics. Due to the nature of these fields, I believe that project work is essential to foster collaboration and encourage students to apply what they learn in real-world scenarios. Furthermore, since these subjects draw on knowledge from various fields such as computer science, mathematics, biology, healthcare, and statistics, integration learning is also necessary to provide a comprehensive and connected learning experience for students. By integrating different domains of knowledge and encouraging collaboration among students, we can create a learning environment that prepares them for the complex challenges they will face in their future careers.

6. Teaching loads assigned to the faculty member and the diversity of courses he/she can deliver (Diversity of courses):

Taught 7 different courses (excluding the graduate students' supervision courses)

- CSBP320 Data Mining
- CSBP411 Machine Learning

- CSBP431 Bioinformatics
- ISBP632 Applied Data Mining
- ITPG698 Special Topics in IT
- ITBP 480 Senior Graduation Project I
- ITBP 481 Senior Graduation Project II.

7. Supervision of hands-on training, graduation projects, laboratory activities, and seminars:

- Supervised 4 Senior graduation projects.
- Supervised 1 Internship student
- Trained 2 undergraduate students in the applications of Machine learning as part of their internship program.

8. Contribution to the development of academic programs, curricula, and courses:

- Program Coordinator: BS in Data Science Program. This is a multidisciplinary program between 3 colleges (CIT, COB, and COB). The proposed program is pending CAA approval.
- Significant contribution to the MSc. Data Science and Machine Learning (Under process), contributed to the drafting of the program learning outcomes, objectives, main topics to cover, curriculum, developed courses, etc.
- Member of the task force to develop a Master of Science in Bioinformatics in collaboration with the College of Medicine and Health Sciences
- Member of the committee responsible for preparing a proposal for the BSc. In Science, technology & Innovation in sport –a multi-disciplinary program. We have already started brainstorming this semester.

9. Development of course content:

- Completely revised the CSBP411 course to avoid any overlap with the CSBP320.
- Developed CSBP470 Predictive Analytics and CSBP475 Advanced topics in Data Science for the proposed BSc. in Data Science.
- Master in Data Science and Machine Learning proposal: Developed several courses including graph Mining, Medical Image Analysis, and Statistical ML.
- Significantly enhanced the following courses: CSBP431, and ITPG713 (included additional topics, and more hands-on and practical sessions).
- Revised the ISBP632 to accommodate the needs of the IoT discipline.

10. Honors or awards for teaching:

- None

11. Grants awarded for teaching innovation:

- PI, Jan 2023-April 2023, SDG Grant-UAEU, AED 29,000, Identifying potential dropout students as a way to improve quality education using graph embedding features and machine learning.

12. Publications in peer-reviewed pedagogical journals of international standing:

- Balqis Al Breiki, Tetiana Habuza, Zaid Shuqfa, Mohamed Adel Serhani, Nazar Zaki, Saad Harous (2021) Customized Rule-Based Model to Identify At-risk Students and Propose Rational Remedial Actions. Big Data and Cognitive Computing. (Q1)

- Balqis Al Braiki, N. Zaki and T. Habuza (2022) Framework for automatically suggesting remedial actions to help students at risk based on explainable ML and rule-based models. International Journal of Educational Technology in Higher Education (ETHE) (Q1).

13. Presentations (oral and/or poster) at international educational conferences:

- None

14. Dissemination of teaching practices, methodologies, etc. at the Departmental/Program, College, or University levels:

- Seminar (College of Education): Artificial Intelligence In Academia: Future Prospective. Feb 3rd, 2022. College of Education, UAEU.

Remark

Research

Research

1. Quantity and quality of research publications, noting particularly a continuation of this effort at UAEU (Journals):

- Albreiki, B., Habuza, T., and Zaki, N. (2023) Extracting topological features to identify at-risk students using machine learning and graph convolutional network models. International Journal of Educational Technology in Higher Education (Q1)
- S. Diao, W. Luo, J. Hou, R. Lambo, H. AL-kuhali, H. Zhao, Y. Tian, Y. Xie, N. Zaki, and W. Qin (2023) Deep Multi-Magnification Similarity Learning for Histopathological Image Classification. IEEE Journal of Biomedical and Health Informatics (Q1) – IF 7.021
- W. Khan, N. Zaki, A. Ahmed, J. Bian, L. Ali, MM. Mehedy, N. Ghenimi, Luai A. Ahmed (2023) Infant Low Birth Weight Prediction using Graph Embedding Features. International Journal of Environmental Research and Public Health (IJERPH) (Q1)
- KB. Tran, JJ. Lang, ..., N. Zaki, et al. (2022) The global burden of cancer attributable to risk factors, 2010–2019: a systematic analysis for the Global Burden of Disease Study 2019. The Lancet, vol. 400, 10352, p539-634 (Q1) – IF 202.731
- W. Khan, N. Zaki, A. Ahmad, MM. Masud, L. Ali, N. Ali, and L. Ahmed. Mixed Data Imputation using Generative Adversarial Networks. IEEE Access (Q1)
- M. Almeqbaali, S. Ouhbi, MA. Serhani, L. Amiri, Reem. Jan, N. Zaki, A. Sharaf, A. Al Helali, and E. Almheiri (2022) A Biofeedback-Based Mobile Application with Serious Games for Young Adults with Anxiety in the UAE: Development and Usability Study. JMIR Serious Games (Q1)
- W. Khan, N. Zaki, MM. Masud, A. Ahmad, L. Ali, N. Ali and L. Ahmed (2022) Infant Birth Weight Estimation and Low Birth Weight Classification in the United Arab Emirates Using Machine Learning Algorithms. Scientific Reports (Q1)
- T Habuza, N Zaki, EA Mohamed, Y Statsenko (2022) Deviation From Model of Normal Aging in Alzheimer's disease: Application of Deep Learning to Structural MRI data and Cognitive Tests. IEEE Access. (Q1)
- Q. Khan, E. Kalbus, N. Zaki, and M.M Mohamed (2022) Utilization of Social Media in Floods Assessment using Data Mining Techniques. PLOS ONE. (Q1)

- H. AlDarmaki, S. Ram, Asad Ullah, and N. Zaki (2022) Unsupervised Automatic Speech Recognition: A Review. *Speech Communication*. (Q1)
- F. Al Zahmi, Y. Statsenko, T. Habuza, R. Awawdeh, H. Elshekhali, M. Lee, N. Salamin, R. Sajid, D. Kiran, S. Nihalani, D. Smetanina, K. Neidl-Van Gorkom, N. Zaki, and T. Loney (2022) Ethnicity-specific features of COVID-19 among Arabs, Africans, South Asians, East Asians and Caucasians in the UAE. *Frontiers in Cellular and Infection Microbiology*. (Q1)
- Statsenko Y, Habuza T, Talako T, Pazniak M, Likhonad E, Pazniak A, Beliakouski P, Gelovani JG, Gorkom KN, Almansoori TM, Al Zahmi F, Qandil DS, Zaki N, et. Al. Deep Learning-Based Automatic Assessment of Lung Impairment in COVID-19 Pneumonia: Predicting Markers of Hypoxia With Computer Vision. *Frontiers in Medicine*. 2022 Jul 26;9:882190. doi: 10.3389/fmed.2022.882190. PMID: 35957860; PMCID: PMC9360571. (Q1)
- Leong, W. T., Mohamad, M. S., Moorthy, K., Choon, Y. W., Adli, H. K., Khairul Nizar Syazwan W. S. W., Wei, L. K., & Zaki, N. (2022). Enhancement of Ethanol Production Using a Hybrid of Firefly Algorithm and Dynamic Flux Balance Analysis. *International Journal of Swarm Intelligence Research International Journal of Swarm Intelligence Research (IJSIR)*, 13(1), 1-13. (Q3)
- Y. Statsenko¹, T. Habuza, D. Smetanina, G. Simiyu, L.n Uzianbaeva, K. Gorkom, N. Zaki, et al. (2022) Brain morphometry and cognitive performance in normal brain aging: age- and sex-related structural and functional changes. *Frontiers in Aging Neuroscience* (Q1).
- Alkaabi, N., N. Zaki, H. Ismail, and M. Khan. 2022. "Detecting Emotions behind the Screen" *AI* 3, no. 4: 948-960. <https://doi.org/10.3390/ai3040056>.
- Hashim, F., Shuaib, K. & Zaki, N. Sharding for Scalable Blockchain Networks. *SN Computer Science*. 4, 2 (2023). <https://doi.org/10.1007/s42979-022-01435-z>
- Yauhen Statsenko, Tetiana Habuza, Klaus Neidl-Van Gorkom, Nazar Zaki, et al. (2021) Proportional changes in cognitive subdomains during normal brain aging. *Frontiers in Aging Neuroscience*. (Q1)
- N. Zaki, H. Singh and E. A. Mohamed (2021) Identifying Protein Complexes in Protein-Protein Interaction Data Using Graph Convolutional Network," in *IEEE Access*, vol. 9, pp. 123717-123726, 2021, DOI: 10.1109/ACCESS.2021.3110845. (Q1)
- Balqis AlBreiki, Nazar Zaki*, and Hany Al Ashwal. (2021) A Systematic Literature Review of Student' Performance Prediction Using Machine Learning Techniques. *Educ. Sci.* 2021, 11(9), 552 (Q2)
- T. Habuza, A. Navaz, F. Hashim, F. Alnajjar, N. Zaki, A. Serhani, and Y. Statsenko (2021) AI applications in robotics, diagnostic image analysis, and precision medicine: Current limitations, future trends, guidelines on CAD systems for medicine. *Informatics in Medicine Unlocked* (Q2), Vol. 24, 100596.
- Y. Statsenko, Tetiana Habuza, I. Charykova, KN. Gorkom, N. Zaki, et al. (2021) Predicting age from behavioral test performance for screening early onset of cognitive decline. *Frontiers in Aging Neuroscience*. (Q1).
- W. Khan, N. Zaki and L. Ali (2021) Intelligent Pneumonia Identification from Chest X-Rays: A Systematic Literature Review. *IEEE Access* (Q1).
- Yauhen Statsenko, Tetiana Habuza, and Nazar Zaki (2021) Prediction of COVID-19 severity using laboratory findings on admission: informative values, thresholds, ML model performance. *BMJ Open* (Q1) - top 5%.

- N. Zaki and E. Mohd (2021) The Estimations of the COVID-19 Incubation Period: A Scoping Review of the Literature. J. of Infection and Public Health (Q1)
- M. Bashri and N. Zaki (2021) #Allhandsondeck Shaun King and unite the right rally: mobilization and the networked social journalist. Volume 29, 2021 - Issue 5 (Q2).
- T. Habuza, N. Zaki, Y. Statsenko and S. Elyassami (2021) MRI and cognitive tests-based screening tool for dementia. Journal of the Neurological Sciences, vol. 429. (Q2)
- Y. Statsenko, T. Habuza, I. Charykova, K. Gorkom, N. Zaki, et al. (2021) Predicting cognitive age for screening for neurodegeneration. Journal of the Neurological Sciences, Vol. 429. (Q2)
- Y. Statsenko, T. Habuza, I. Charykova, K. Gorkom, N. Zaki, et al. (2021) AI models of age-associated changes in CNS composition identified by MRI. Journal of the Neurological Sciences, Vol. 429. (Q2)

2. Quantity and quality of research publications, noting particularly a continuation of this effort at UAEU (Books):

- Wenjian Qin, Nazar Zaki, Fa Zhang, Jia Wu, Fan Yang (2022) Computational Mathematics Modeling in Cancer Analysis. Springer.

3. Presentations (oral and/or poster) at international research conferences:

- Z. Rustamov, J. Rustamov, MS. Sultana, J. Ywei, V. Balakrishnan, N. Zaki (March 2023) Cardiovascular Disease Prediction using Ensemble Learning Techniques: A Stacking Approach. 19th IEEE International Colloquium on Signal Processing & Its Applications (CSPA), Pages 93-98.
- X. Wu, M. Cui, Y. Gao, D. Sun, H. Ma, E. Zhang, Y. Xie, N. Zaki, W. Qin (2022) Tubular Structure-Aware Convolutional Neural Networks for Organ at Risks Segmentation in Cervical Cancer Radiotherapy. Computational Mathematics Modeling in Cancer Analysis: First International Workshop, CMMCA 2022, Held in Conjunction with MICCAI 2022, Singapore, September 18, 2022, Proceedings. Pages 131-140
- A. Almusalami, T. Habuza, H. Singh, Nazar Zaki (Nov 2022) AffordAD: A User-Friendly Tool for Estimating Housing Affordability in Abu Dhabi. 2022 IEEE 14th Annual Undergraduate Research Conference on Applied Computing (URC), Pages 1-6.
- M. Yue, Z. Dai, J. He, Y. Xie, N. Zaki and W. Qin (2022) MRI-guided Automated Delineation of Gross Tumor Volume for Nasopharyngeal Carcinoma using Deep Learning. IEEE 35th International Symposium on Computer-Based Medical Systems - IEEE CBMS 2022.
- W. Khan and N. Zaki (2022) COVID-19 Detection from Chest X-ray using Deep Learning Ensemble Classifier. International Conference on Data Intelligence and Cognitive Informatics (ICDICI 2021). Data Intelligence and Cognitive Informatics pp 429-441.
- L. Ali, S. Harous, N. Zaki, W. Khan, F. Alnajjar, H. Al Jassmi (2021) Performance evaluation of different algorithms for crack detection in concrete structures. 2nd International Conference on Computation, Automation and Knowledge Management (ICCAKM). Pages 53-58.
- T. Habuza, N. Zaki, Y. Statsenko, F. Alnajjar, S. Elyassami (2021) Predicting the diagnosis of dementia from MRI data: Added value to cognitive tests. The 7th Annual International Conference on Arab Women in Computing in conjunction with the 2nd Forum of Women in Research, Pages The 7th Annual International Conference on Arab Women in Computing in conjunction with the 2nd Forum of Women in Research

4. External and internal research grants:

- Co-PI and Platform Director, 2022-2027, ASPIRE Research Institute (formally VRI) for Precision Medicine, 70 Million AED.
- PI, 2021-2023, UAEU-CAS Joint Grant, AED 399,000, Real-time adaptive brachytherapy treatment planning system based on multi-modality image guidance for cervical cancer.
- Co-PI, 2022-2026, Center-Based UAEU, AED 718,000, Intelligent Clustered Body Language Analysis of Healthcare Patients.
- PI, May 2022- May 2023, SURE+, AED 32,000, Opinion Spam Detection Using Natural Language Processing and Machine Learning.
- PI, 2021-2022, SDG Grant-UAEU, AED 37,000, Using Machine Learning and Satellite Data to Guide Poverty Reduction.

5. Impact of candidate's research on his/her discipline:

- None

6. Impact of candidate's research on his/her discipline:

Google Scholar (April 20th, 2023):

- H-index 28
- 2021: 436
- 2022: 620
- 2023: 198 (so far)

Scopus (April 20th 2023):

- H-index: 20
- 2021: 249
- 2022: 361
- 2023: 119 (so far)

A number of downloads of my network analytics tools (April 20th 2023):

- Cytoscape: PEmeasure (2900)
- Cytoscape: PEWCC (2706)
- Cytoscape: CyLinkPredictor (1995)
- Cytoscape: PCM (2028)

Total Downloads: 9,629

7. Impact of candidate's research on his/her discipline Successful supervision of Master's or Doctoral students:

Graduated 2 PhD. students:

- Tetiana Habusa (Fall 2022)
- Balqis Al Braiki (Spring 2023)

Currently supervising 3 Ph.D. students:

- Wasif Khan (to defend in Summer 2023)
- Shatha Ali Radeef
- Ahmed ElMassry

Graduated 2 MSc. Students:

- Wala Suliman Mohamed, Advisor, Graduated in 2022.
- Ahmed Elsayed (Co-Advisor), CoE, Graduated in 2022.

8. Any other achievements in the area of scholarship:

- CIT Award for Excellence in Scholarship (2022-2023)
- 2022 Received the University Merit Award.
- 2021 Received Excellent Research Award – Best research work in the 2nd forum for a woman in research. The University of Sharjah.
- Comprehensive Exam: Every semester.

Remark

Services

Services

1. Service in academic management at the university, college, or departmental/program level:

- Director: Big Data Analytics Center, 2019-July 2022.

2. Service in academic management at the college or departmental/program level:

- 2020-2021: Chair, Dept. Promotion Committee
- 2022 -2023: Member, Dept. Accreditation Committee
- 2022 -2023: Member, Dept. Hiring Committee
- 2022-2023: Member of, College Promotion Committee.

3. Service in academic management at the university:

- 2014-Date: Chair, Receipt of goods, materials, and services committee
- 2022-2023: Member of, Graduate Studies Council
- 2022-Date: Member, UAEU-ADNOC Research Group

4. Participation in the activities of national, regional, or international professional organizations/ associations committees in his/her field of specialization:

- Member: International Society for Computational Biology (ISCB), ISMB
- Member: International Association of Engineers (IAENG)
- Member: Asia-Pacific AI Association (AAIA)
- Selected among the 60 global leaders in AI to bring unique insight into future topics of AI.
- 2022 Invited Speaker: "Technology including AI as tool for better media communication", Global Media Congress, Abu Dhabi.
- Foundation Advisory Board Member: International AIQT Foundation.

5. Provision of consultancy or advisory services related to area of expertise:

- 2022: Evaluator/ Judge: 39th session of the Rashid bin Humaid Award for Culture and Science (AI branch) – Paid honorarium of US\$ 300.
- 2022: External reviewer (Promotion case at Abu Dhabi School of Management) – Paid honorarium of US\$ 400.

- 2021: Recognition/reward for leading and completing the development of the student monitoring system which was key for the College of Education's pursuit of accreditation - paid AED 5,000.
- Mentor: Open Data ADDATHON Dec 6-20 2021.
- Member, UAE 50-Year R&D Plan Public Engagement, UAE Ministry of Cabinet Affairs, Prime Minister Office.

6. Contribution to the planning and/or delivering of continuous professional development activities for faculty:

- Mentored two junior faculty members to prepare grant applications.

7. Contribution and commitment to the application of international standards:

- Heavily involved in ABET accrediting of our BSc in Computer Science.

8. Participation in peer evaluations for academic purposes:

- 2022-2023 Member, College Promotion Committee
- 2021-2022 Chair, Department Promotion Committee.

9. Contribution to student's advising and counseling activities:

- Advice more than 20 students every semester
- 2022 Ph.D. thesis examiner: Examine the first-ever Ph.D. thesis at the College of Law, UAEU.
- 2022 Ph.D. thesis examiner: College of Engineering.

10. Contribution to student's advising and supervising activities, extra-curricular activities, or any other activity pertaining to student services:

- Advice more than 20 students every semester
- 2022 Mentored two groups of students to participate in the Sharjah Sustainability Award (EPAA). Both teams were shortlisted and demonstrated their projects. The announcement of the winners will be in May this year.
- Training Program: Machine Learning for All, Expo 21-22nd Feb 2022 (26 participants).
- Virtual Internship programs: Trained 21 students Spring 2021 and Fall 2021.
- Internship: Trained 4 students between Spring 2021 and Spring 2022.
- Student mentoring: mentored students to win the Best research work in the 2nd forum for women in research. The University of Sharjah.
- Mentored 2 students to be among the 3 winners of the ADDATHON 2021.
- Mentored 3 students to participate in the UAE Hackathon 5.0. 2022.
- Trained one Master student sent from MBZU as part of her internship program.

11. Contribution to the selection, and development of orientation programs and offering other supportive services for new students:

- NA.

12. Contribution to the organization of professional workshops and/or training programs off-campus:

- Co-Chair, CMMCA 2022 in conjunction with MICCAI 2022, 25th International Conference on Medical Image Computing and Computer Assisted Intervention, Sep 18-22, 2022, Singapore.
- Regional Chair: The 6th International Conference on Data Storage and Data Engineering (DSDE 2023), February 24-26, 2023 | Mianyang, Sichuan, China.
- Chair, a special session on “Intelligent Healthcare Environment” at the 17th International Conf. on Intelligent Environments (<https://mdx.ac.ae/ie2021>).

13. Membership of editorial/advisory boards of academically refereed publications, such as scientific journals, periodicals and magazines:

Associate Editing

- Engineering Applications of Artificial Intelligence (IF 7.802)
- IEEE Access (IF 3.367)

Guest Editing

- IEEE Journal of Biomedical and Health Informatics (IF 7.021)
- Computerized Medical Imaging and Graphics (IF 7.422).

14. Refereeing research papers submitted for publication in scientific periodicals or conference proceedings:

- Served as editor for 4 leading journals. Refereeing papers on a daily basis.
- In addition: refereed more than 2 journal papers and 2 conference papers.

Remark

Committee Evaluation

1 - Comments on the extent of achieving the goals, evaluations in the three areas and the overall evaluation.

Dr Nazar achieved successfully all his teaching goals; has excellent SET scores, and great participation in course and curriculum development. He has also published in educational topics as well. In Research, he is an author in 27 journal publications with 2 as 1st author - He is an author in 7 conference papers - He is a co-PI in 1 external grant and 1 internal grant - He supervised 5 Phd students with 2 graduated and 2 MS students - He received CIT Award for Excellence in Scholarship - University Merit Award and Excellence Research Award. He Served as the director of the Big Data Analytics Center (2019 - July 2022) --Member of 3 major college committees and chair of the Department Promotion committee (2020-2021) -- Chair of the University Receipt of Goods, Materials and Services committee and members of two other university-level committees --Participation in several international professional organization committees -- Heavily involved in ABET accrediting of the BSc program in Computer Science -- Extensive contribution to student's advising and supervising activities -- Provided some local compensated consultancy services -- Member of Editorial/advisory boards of several journals with IF -- Reviewed several papers for journals with impact factor.

2 - Comments on notable strength and highlight of success

NA

3 - Comments on issues that have affected the faculty member's achievements

NA

4 - Comments on the faculty member's support, development and resources needs

NA

5 - Future directions and suggested goals for the next work-planning cycle

NA

Committee Evaluation Summary

Teaching	Excellent
Research	Excellent
Services	Excellent
Overall Evaluation	Excellent

Department Chair Evaluation

Comments on committee evaluation

I concur with the committee evaluation and recommendation. I congratulate Dr. Nazar for his outstanding achievements.

Statement on collegiality and collegial of the faculty member

Dr. Nazar treats others with respect and acts in a supportive way. He is an excellent role model faculty in CIT.

Department Chair Evaluation Summary

Teaching	Excellent
Research	Excellent
Services	Excellent
Overall Evaluation	Excellent

Faculty Member Comment

Comment

I wish to extend my sincere gratitude to both the evaluation committee and the department chair for their supportive and uplifting comments. Your positive feedback truly invigorates my commitment to achieving more in the future.

Faculty Member Acceptance of the Evaluation Results

Faculty Member accepted the evaluation results

Dean Evaluation

Comment

Dr. Nazar's accomplishments in research, teaching and service are exceptional. He has developed an expansive body of research work in different areas of computing, data science and artificial intelligence. His work is reflected in the impressive number of high-quality papers that he published during this performance evaluation cycle. He is to be commended for his outstanding work and for his commitment to supervise, mentor and graduate students. He is the well-deserving recipient of the CIT Award for Excellence in Scholarship, the University Merit Award and the Excellence in Research Award. An outstanding accomplishment.

Dr. Nazar is a dedicated teacher, who works hard to improve students' learning experience and to enhance their self-learning skills, through active participation. He maintains a high-quality portfolio of teaching. He is to be commended for the extracurricular activities and for his continued strive to help underground students improve their research skills. He is to be commended for his immense contribution to the data science inter-disciplinary program.

Dr. Nazar's accomplishments in service reflect his leadership and the high standard of his contributions to the College, the University and the Community. He serves on a number of major committees, at the College- and the University-level. He was instrumental in establishing and directing the Big Data Analytics Center. He is also to be commended for his dedication and active participation in the ABET accreditation process of the BSc program in Computer Science His professional services to the community are equally appreciated, as it increases college visibility and recognition.

College Dean Evaluation Summary

Teaching	Excellent
Research	Excellent
Services	Excellent
Overall Evaluation	Excellent