

Dr. BROUMI SAID

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BRIEF BIOGRAPHY

Dr. Broumi Said completed his MSc and PhD in Computer Science from University of Hassan II of Casablanca, Morocco. Currently, he is serving as an Assistant Professor at Regional Center for the Professions of Education and Training, Casablanca-Settat, Morocco. He is permanent member at Laboratory of Information Processing, Faculty of Science Ben M'Sik, University Hassan II, Casablanca, Morocco. His research interests are in the field of graph theory, extended fuzzy graphs, decision analysis and neutrosophic theory. He has diversity in his research work. he has published several work on neutrosophic graph theory, soft set theory, multi-attribute decision analysis and some alternative theories of Neutrosophic Mathematics. He has published more than 200 research articles in international peer-reviewed ISI Indexed /Impact factor journals. Some of his papers have been published in high impact journals including, Complex & Intelligent Systems, Computational and Applied Mathematics, Symmetry, and Journal of Neutrosophic Set and Systems. His work has largely been cited and total citation is more than 5992 (Scholar Google, H-index 41). He has presented his research work at some national as well as international conferences. He has been acting as a reviewer for a number of International journals. He is also an Editor in chief of the following journals:

1. International Journal of Neutrosophic Set and Systems : <http://fs.unm.edu/NSS>
2. International Journal of Neutrosophic Science: <http://americaspg.com/journals/show/21>

Associate Editor

- International Annals of Fuzzy Mathematics and Informatics : <http://www.afmi.or.kr/>
- CURRENT CHINESE SCIENCE: <https://currentchinesescience.com/editorial-board.php>
- Journal of Fuzzy Extension & Applications (JFEA): <http://www.journalfea.com/journal/editorial.board>
- Asia Mathematika: <http://www.asiamath.org/editor.html>
- Journal of New Theory: <http://www.newtheory.org/editorial.html>
- International Journal of Research in Industrial Engineering: <http://www.riejournal.com/journal/editorial.board>
- International Journal of Smart Sensor Technologies and Applications (IJSSTA): <https://www.igi-global.com/journal/international-journal-smart-sensor-technologies/224368>

Fields of Interest

Graph Theory, Neutrosophic Mathematics, Neutrosophic Graph Theory, Multi-Attribute Decision Analysis and Soft set theory.

Computer Skills

Math Packages MATLAB.
Typography MS Word, MS Excel.

Articles in International Journals

1. **S. Broumi**, D. Nagarajan, M. Lathamaheswari, M. Talea, Assia Bakali, Florentin Smarandache, Intelligent algorithm for trapezoidal interval valued neutrosophic network analysis, CAAI Transactions on Intelligence Technology, 2020, Vol. 5, Iss. 2, pp. 88–93.
2. **S. Broumi**, M. Lathamaheswari, R. Tan ,D. Nagarajan, M.Talea, F. Smarandache and A. Bakali, A new distance measure for trapezoidal fuzzy neutrosophic numbers based on the centroids, Neutrosophic Sets and Systems, vol. 35, 2020, pp. 478-502. DOI: 10.5281/zenodo.3951706.

3. S.Topal, **S. Broumi**, A. Bakali, M. Talea and F. Smarandache, A Python Tool for Implementations on Bipolar Neutrosophic Matrices, Neutrosophic Sets and Systems, Vol. 28, 2019, 138-161. DOI: 10.5281/zenodo.3382529
4. **S. Broumi**, M. Talea, A. Bakali, P. K.Singh, F. Smarandache, Energy and Spectrum Analysis of Interval Valued Neutrosophic Graph using MATLAB, Neutrosophic Sets and Systems, Vol. 24, 2019, 46-60.
5. **S. Broumi**, A. Dey, M. Talea, A. Bakali, F. Smarandache, D. Nagarajan, M. Lathamaheswari and R. Kumar, Shortest Path Problem using Bellman Algorithm under Neutrosophic Environment, Complex & Intelligent Systems, 2019, 5, 409–416, <https://doi.org/10.1007/s40747-019-0101-8>,
6. **S. Broumi**, M.Talea, A. Bakali, F. Smarandache, D.Nagarajan, M. Lathamaheswari and M.Parimala, Shortest path problem in fuzzy, intuitionistic fuzzy and neutrosophic environment: an overview, Complex & Intelligent Systems, 5, 2019, 371–378, <https://doi.org/10.1007/s40747-019-0098-z>
7. **S.Broumi**,D. Nagarajan, A. Bakali, M. Talea, F. Smarandache, M. Lathamaheswari, The shortest path problem in interval valued trapezoidal and triangular neutrosophic environment, Complex & Intelligent Systems, 5, 2019, 391–402, <https://doi.org/10.1007/s40747-019-0092-5>
8. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, K. P. Krishnan Kishore, R. Şahin, Shortest Path Problem under Interval Valued Neutrosophic Setting, International Journal of Advanced Trends in Computer Science and Engineering, Vol. 8(1.1), 2019, 216-222.
9. **S. Broumi**, D. Nagarajan, A. Bakali, M. Talea, F. Smarandache, M. Lathamaheswari and J. Kavikumar, Implementation of Neutrosophic Function Memberships Using MATLAB Program, Neutrosophic Sets and Systems, Vol. 27, 2019, 44-52. DOI: 10.5281/zenodo.3275355
10. **S. Broumi**, M. Talea, A. Bakali, F. Smarandache, P. K. Singh, M.Murugappan, V. Venkateswara Rao: A Neutrosophic Technique Based Efficient Routing Protocol for MANET Based on Its Energy and Distance, Neutrosophic Sets and Systems, Vol. 24, 2019, 61-69.
11. **S. Broumi**, M. Talea, A. Bakali, F. Smarandache, Single Valued Neutrosophic Graphs, Journal of New Theory, N 10, 2016, 86-101.
12. **S. Broumi**, A. Dey, A. Bakali, M. Talea, F. Smarandache, L. H. Son, D. Koley, Uniform Single Valued Neutrosophic Graphs, Neutrosophic Sets and Systems, Vol. 17, 2017, 42-49.

13. **S. Broumi**, L.H. Son, A. Bakali, M. Talea, F. Smarandache, G. Selvachandran, Computing Operational Matrices in Neutrosophic Environments: A Matlab Toolbox, Neutrosophic Sets and Systems, Vol. 18, 2017, 58-66
14. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, A Matlab Toolbox for interval valued neutrosophic matrices for computer applications, Uluslararası Yönetim Bilişim Sistemlerive Bilgisayar Bilimleri Dergisi, 1(1), 2017, 1-21
15. G. Quek, **S. Broumi**, G. Selvachandran, A. Bakali, M. Talea and F. Smarandache, Some Results on the Graph Theory for Complex Neutrosophic Sets, Symmetry, 10(6), 2018.
16. **S. Broumi**, A. Bakali, M. Talea, and F. Smarandache, Isolated Single Valued Neutrosophic Graphs. Neutrosophic Sets and Systems, Vol. 11, 2016, 74-78
17. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache and M. Ali, Shortest Path Problem under Bipolar Neutrosophic Setting, Applied Mechanics and Materials, Vol. 859, 2016, 59-66.
18. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, Computation of Shortest Path Problem in a Network with SV-Triangular Neutrosophic Numbers, International Journal of Management Information Systems and Computer Science, 3(2), 2019, 41-51.
19. A. Dey, **S. Broumi**, L. H. Son, A. Bakali, M. Talea, F. Smarandache, A new algorithm for finding minimum spanning trees with undirected neutrosophic graphs, Granular Computing volume 4, 2019, 63–69.
20. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, and R. Verma, Computing Minimum Spanning Tree in Interval Valued Bipolar Neutrosophic Environment, International Journal of Modeling and Optimization, Vol.7(5), 2017, 300-304, DOI: 10.7763/IJMO.2017.V7.602,
21. **S. Broumi**, F. Smarandache, M. Talea and A. Bakali, An Introduction to Bipolar Single Valued Neutrosophic Graph Theory, Applied Mechanics and Materials, vol.841,2016, 184-191.
22. **S. Broumi**, M. Talea, A. Bakali, F. Smarandache, On Bipolar Single Valued Neutrosophic Graphs, Journal of New Theory, N11, 2016,84-102.
23. A. Hassan, M. A. Malik, **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, Special types of bipolar single valued neutrosophic graphs, Annals of Fuzzy Mathematics and Informatics, Vol.14 (1), 2017, 55-73.
24. **S. Broumi**, M. Murugappan, M. Talea, A. Bakali, F. Smarandache, P. K. Singh and A. Dey, Single Valued $(2n+1)$ Sided Polygonal Neutrosophic Numbers and Single Valued $(2n)$ Sided Polygonal Neutrosophic Numbers, Neutrosophic Sets and Systems, Vol. 25, 2019, 54-65. DOI: 10.5281/zenodo.2631502

25. R. Narmada Devi, N. Kalaivani, **S. Broumi** and K. A. Venkatesan, Characterizations of Strong and Balanced Neutrosophic Complex Graphs, *International Journal of Engineering & Technology*, 7 (4.10), 2018, 593-597.
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27. R. Kumar, S. A. Edalatpanah, S. Jha, **S.Broumi**, R. Singh and A. Dey, A Multi Objective Programming Approach to Solve Integer Valued Neutrosophic Shortest Path Problems, *Neutrosophic Sets and Systems*, Vol. 24, 2019, 134-154. DOI: 10.5281/zenodo.2595968
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30. K. Prabha, S. Broumi, S. Topal, A NOVEL ROUTING NETWORK ALGORITHM VIA NEUTROSPHIC FUZZY SET APPROACH, *International Journal of Neutrosophic Science (IJNS)* Vol. 13, No. 1, PP. 9-22, 2021
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32. M. Parimala, **S. Broumi**, K. Prakash, S.Topal, Bellman–Ford algorithm for solving shortest path problem of a network under picture fuzzy environment. *Complex Intell. Syst.* (2021). <https://doi.org/10.1007/s40747-021-00430-w>
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40. **S.Broumi**, A. Bakali, M.Talea, F.Smarandache, A.Dey and Le H. Son, Spanning Tree Problem with Neutrosophic Edge Weights. 2018 Proc. Comput. Sci. 2018, 127,190–199.
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 48. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache and L. Vladareanu, Applying Dijkstra Algorithm for Solving Neutrosophic Shortest Path Problem, Proceedings of the 2016 International Conference on Advanced Mechatronic Systems, Melbourne, Australia, 2016, 412-416.
 49. **S. Broumi**, M. Talea, A. Bakali, F. Smarandache, Application of Dijkstra algorithm for solving interval valued neutrosophic shortest path problem, 2016 IEEE Symposium Series on Computational Intelligence (SSCI), 2016, 1 – 6
 50. **S. Broumi**, M. Talea, F. Smarandache and A. Bakali, Single Valued Neutrosophic Graphs: Degree, Order and Size, IEEE International Conference on Fuzzy Systems (FUZZ), 2016, 2444-2451.
 51. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache and L. Vladareanu, Computation of Shortest Path Problem in a Network with SV-Trapezoidal Neutrosophic Numbers, Proceedings of the 2016 International Conference on Advanced Mechatronic Systems, Melbourne, Australia, 2016 , pp.417-422.
 52. **S. Broumi**, A. Bakali, T. Mohamed, F. Smarandache and L. Vladareanu,” Shortest Path Problem Under Triangular Fuzzy Neutrosophic Information,” 10th International Conference on Software, Knowledge, Information Management & Applications (SKIMA), 2016, pp.169-174.

53. A. Bahnasse, A. Badri, M. Talea, F. E. Louhab, A. Al-Harbi, A. Khiat, **S. Broumi**, (2018). Wimax technology for maritime intelligent transport systems communication. Proceedings of the 2nd International Conference on Future Networks and Distributed Systems - ICFNDS '18. doi:10.1145/3231053.3231063

Chaptre of Book

1. **S. Broumi**, U. Kifayat, M. Tahir, M. Talea, A. Bakali, F. Smarandache, D. Nagarajan, and M. Lathamaheswari, (2021) Trends on Extension and Applications of Neutrosophic Graphs to Robots, C. Kahraman and E. Bolturk (eds.), Toward Humanoid Robots: The Role of Fuzzy Sets, Studies in Systems, Decision and Control 344, https://doi.org/10.1007/978-3-030-67163-1_11
2. **Broumi, S.**, Topal, S., Bakali, A., Talea, M., Smarandache, F. (2020). A Novel Python Toolbox for Single and Interval-Valued Neutrosophic Matrices. In Abdel-Basset, M., & Smarandache, F. (Ed.), Neutrosophic Sets in Decision Analysis and Operations Research (pp. 281-330). IGI Global. <http://doi:10.4018/978-1-7998-2555-5.ch013>
3. **S. Broumi**, S. G. Quek, G. Selvachandran, F. Smarandache, A. Bakali, & M. Talea, (2020). Finding the Shortest Path With Neutrosophic Theory: A Tool for Network Optimization. In Smarandache, F., & Broumi, S. (Ed.), Neutrosophic Graph Theory and Algorithms (pp. 1-32). IGI Global. <http://doi:10.4018/978-1-7998-1313-2.ch001>
4. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, and P. K. Singh, Properties of Interval-Valued Neutrosophic Graphs, in :C. Kahraman and I. Otay (eds.), Fuzzy Multicriteria Decision Making Using Neutrosophic Sets, Studies in Fuzziness and Soft Computing 369, 2019, 173-202 https://doi.org/10.1007/978-3-030-00045-5_8.
5. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, V. Uluçay, M. Sahin A. Dey, M. Dhar, R. P. Tan, A. Bahnasse and S. Pramanik, Neutrosophic Sets: An Overview, In book: New Trends in Neutrosophic Theory and Applications, Edition: Volume 2, Publisher: Pons edition, Editors: Florentin Smarandache, Surapati Pramanik, 2018, 403-434.
6. **S. Broumi**, A. Bakali, M. Talea, F. Smarandache, & P. K. Kishore Kumar, A new concept of matrix algorithm for MST in undirected interval valued neutrosophic graph. Chapter in book- Neutrosophic Operational Research- Volume II- Florentin Smarandache, Mohamed Abdel-Basset and Victor Chang (Editors), 2017, 54-69. ISBN 978-1-59973-537-
7. M. Khan, S. Umar, **S. Broumi**, Laplacian Energy of a Complex Neutrosophic Graph. In: Kahraman C., Otay I. (eds) Fuzzy Multi-criteria Decision-Making Using Neutrosophic Sets. Studies in Fuzziness and Soft Computing, Vol 369. Springer, Cham, 2019, 203-232

8. F. Smarandache, **S. Broumi**, P. K. Singh, C Liu, V. V. Rao, H.L. Yangk, I.Patrascu, A. Elhassouny, Introduction to neutrosophy and neutrosophic environment, Editor(s): Yanhui Guo, Amira S. Ashour, Neutrosophic Set in Medical Image Analysis, Academic Press, 2019, Pages 3-29, <https://doi.org/10.1016/B978-0-12-818148-5.00001-1>.

Books

1. « Neutrosophic Graph Theory and Algorithms », Editor :Florentin Smarandache (University of New Mexico, USA) and **Said Broumi** (Faculty of Science Ben M'Sik, University Hassan II, Morocco).2020, Pages: 406, DOI: 10.4018/978-1-7998-1313-2
<https://www.igi-global.com/book/neutrosophic-graph-theory-algorithms/232296>
2. « Neutrosophic Theories in Communication, Management and Information Technology »
Editor :Florentin Smarandache (University of New Mexico, USA) and Said Broumi (Faculty of Science Ben M'Sik, University Hassan II, Morocco)
<https://novapublishers.com/shop/neutrosophic-theories-in-communication-management-and-information-technology/>

