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<b>Research interest</b>	Natural language processing, Bioinformatics, Digital humanities, Large scale optimization.
<b>Teaching interest</b>	Data Structure, Discrete Mathematics, Design and Analysis of Algorithms, Theory of Computation, and Numerical Algorithms.
<b>Education</b>	<p><b>Doctor of Philosophy in Computer Science.</b> University of Colorado, Boulder, Colorado, USA, in 1998. Dissertation: “Use of Smoothing Methods with Stochastic Perturbation for Global Optimization”.</p> <p><b>Master of Electrical Engineering</b> University of Colorado, Boulder, Colorado, USA, in 1988. Dissertation: “Floating Point System with a Variable Length Exponent”.</p> <p><b>Bachelor of Science in Electrical and Computer Engineering</b> University of Michigan, Ann Arbor, Michigan, USA, in 1982.</p>
<b>Professional appointments</b>	<p><b>Professor at King Saud University</b> College of Computer and Information Sciences. Computer Science department. From April 2018 – present.</p> <p><b>Associate Professor at King Saud University</b> College of Computer and Information Sciences. Computer Science department. From 2/2014 to 4/2014.</p> <p><b>Assistant Professor at King Saud University</b> College of Computer and Information Sciences. Computer Science department. From 9/1999 to 2/2014.</p> <p><b>Teaching Assistant at King Saud University</b> College of Computer and Information Sciences. Computer Science department. From 8/1984 to 9/1985.</p>
<b>Committees</b>	Convener of PhD comprehensive exams for Algorithms and Theory (2012-); in charge of BSc capstone projects committee (2010-2014); and convener of the department’s annual report committee (2003-), all at department of CS, KSU.
<b>Activities and services</b>	Reviewed for several ISI journals, including: IEEE Access, IEEE Signal Processing Letters, Information Sciences (Elsevier), Knowledge-Based Systems (Elsevier), Journal of King Saud University – Computer and Information Sciences (Elsevier), Language Resources and Evaluation (Springer), Natural Language Engineering (Cambridge), Journal of Information

Science (Sage Publications), and Transactions on Asian and Low-Resource Language Information Processing (ACM).

## Recent Publications

- (1) S. Alzanin, and **A. Azmi**, “Rumor detection in Arabic tweets using semi-supervised and unsupervised expectation–maximization”, *Knowledge-Based Systems (KBS)*, Doi: [10.1016/j.knosys.2019.104945](https://doi.org/10.1016/j.knosys.2019.104945)
- (2) H. Alshehri, M. Hussain, H. Aboalsamh, Q. Emad-ul-Haq, M. AlZuair, and **A. Azmi**, “Alignment-free cross-sensor fingerprint matching based on the co-occurrence of ridge orientations and Gabor-HoG descriptor”, *IEEE Access*, 2019. Doi: [10.1109/ACCESS.2019.2924127](https://doi.org/10.1109/ACCESS.2019.2924127)
- (3) **A. Azmi**, M. Almutery, and H. Aboalsamh, “Real-word errors in Arabic texts: A better algorithm for detection and correction”, *IEEE/ACM Transactions on Audio, Speech and Language Processing (IEEE T ASLP)*, vol. 27, no. 8, pp. 1308-1320, 2019. Doi: [10.1109/TASLP.2019.2918404](https://doi.org/10.1109/TASLP.2019.2918404)
- (4) **A. Azmi**, M. Al-Jouie, and M. Hussain, “AAEE – Automated evaluation of student’s essays in Arabic language”, *Information Processing & Management (IPM)*, vol. 56, no. 5, pp. 1736-1752, 2019. Doi: [10.1016/j.ipm.2019.05.008](https://doi.org/10.1016/j.ipm.2019.05.008)
- (5) A. Al-Numai and **A. Azmi**, “The Development of Single-Document Abstractive Text Summarizer During the Last Decade”, in: A. Fiori (Eds), *Trends and Applications of Text Summarization Techniques*, IGI Global, 2019.
- (6) **A. Azmi**, A.O. Al-Qabbany, and A. Hussain, “Computational and natural language processing based studies of hadith literature: a survey”. *Artificial Intelligence Review*, vol. 52, no. 2, pp. 1369-1414, 2019. Doi: [10.1007/s10462-019-09692-w](https://doi.org/10.1007/s10462-019-09692-w)
- (7) A.M. Al-Ssulami, **A. Azmi**, and M. Hussain, “CodSeqGen: A tool for generating synonymous coding sequences with desired GC-contents”, *Genomics*, 2019. Doi: [10.1016/j.ygeno.2019.02.002](https://doi.org/10.1016/j.ygeno.2019.02.002)
- (8) A. Al-Ghadir and **A. Azmi**, “A Study of Arabic Social Media Users—Posting Behavior and Author’s Gender Prediction”, *Cognitive Computation*, Springer, vol. 11, no. 1, pp. 71-86, 2019. Doi: [10.1007/s12559-018-9592-7](https://doi.org/10.1007/s12559-018-9592-7).
- (9) S. Alzanin and **A. Azmi**, “Detecting Rumors in Social Media: A Survey”, *Procedia Computer Science* 138 (2018), pp. 294-300.
- (10) M. Almedlej and **A. Azmi**, “A‘rib — A Tool to Facilitate School Children’s Ability to Analyze Arabic Sentences Syntactically”, in: N. El Gayar and C.Y. Suen (Eds), *Computational Linguistics, Speech and Image Processing for Arabic Language*, World Scientific, 2018. Doi: [10.1142/9789813229396\\_0006](https://doi.org/10.1142/9789813229396_0006).
- (11) **A. Azmi** and N. Altmami, “An Abstractive Arabic Text Summarizer with User Controlled Granularity”, *Information Processing & Management (IPM)*, vol. 54, no. 6, pp. 903-921, 2018. Doi: [10.1016/j.ipm.2018.06.002](https://doi.org/10.1016/j.ipm.2018.06.002)
- (12) **A. Azmi** and E. Aljafari, “Universal Web Accessibility and the Challenge to Integrate Informal Arabic Users – A Case Study”, *Universal Access in the Information Society (UAIS)*, Springer, vol. 17, no. 1, pp. 131-145, 2018. Doi: [10.1007/s10209-017-0522-3](https://doi.org/10.1007/s10209-017-0522-3)
- (13) M.F. Al-Jouie and **A. Azmi**, “Automated Evaluation of School Children Essays in Arabic,” *Procedia Computer Science* 117 (2017), pp. 19-22.
- (14) R. Alnefaie and **A. Azmi**, “Automatic Minimal Diacritization of Arabic Texts,” *Procedia Computer Science* 117 (2017), pp. 169-174.

- (15) **A. Azmi** and N. Alshenaifi, “LEMAZA: An Arabic why-question answering system”, *Natural Language Engineering (NLE)*, vol. 23, no. 6, pp. 877-903, 2017. Doi: [10.1017/S1351324917000304](https://doi.org/10.1017/S1351324917000304)
- (16) A.M. Al-Ssulami, **A. Azmi** and H. Mathkour, “An Efficient Method for Significant Motifs Discovery from Multiple DNA Sequences”, *J Bioinformatics and Computational Biology (JBCB)*, vol. 15, no. 4, 2017. World Scientific. Doi: [10.1142/S0219720017500147](https://doi.org/10.1142/S0219720017500147)
- (17) H. Aldayel and **A. Azmi**, “Arabic Tweets Sentiment Analysis – Hybrid Scheme”, *J Information Science (JIS)*, Sage Publication, vol. 42, no. 6, pp. 782-797, 2016. Doi: [10.1177/0165551515610513](https://doi.org/10.1177/0165551515610513)
- (18) **A. Azmi** and N. Alshenaifi, “Answering Arabic Why-Questions: Baseline vs. RST-Based Approach”, *ACM Transactions on Information Systems (TOIS)*, vol. 35, no. 1, article 6, 2016. Doi: [10.1145/2950049](https://doi.org/10.1145/2950049)
- (19) F. Azmi and **A. Azmi**, “Towards Teaching and Learning Mathematics using Technology”, in: K.S. Alshahrani and M. Ally (Eds), *Transforming Education in the Gulf Region: Emerging Learning Technologies and Innovative Pedagogy for the 21st Century*, Routledge Research in Education, 2016. [www.routledge.com/products/9781138657007](http://www.routledge.com/products/9781138657007)
- (20) **A. Azmi**, “On Identifying Minimal Absent and Unique Words: An Efficient Scheme”, *Cognitive Computation*, Springer, vol. 8, pp. 603-613, 2016. Doi: [10.1007/s12559-016-9385-9](https://doi.org/10.1007/s12559-016-9385-9)
- (21) **A. Azmi**, “Identification of Tandem Repeats Over Large-Alphabet Inputs”, *Information Sciences (INS)*, Elsevier, vol. 345, no. 6, pp. 96-105, 2016. Doi: [10.1016/j.ins.2016.01.050](https://doi.org/10.1016/j.ins.2016.01.050)
- (22) **A. Azmi** and E. Aljafari, “Modern Information Retrieval in Arabic – Catering to Standard and Colloquial Arabic Users”, *J Information Science (JIS)*, Sage Publication, vol. 41, no. 4, pp. 506-517, 2015. Doi: [10.1177/0165551515585720](https://doi.org/10.1177/0165551515585720)
- (23) **A. Azmi** and R. Almajed, “A Survey of Automatic Arabic Diacritization Techniques”, *Natural Language Engineering (NLE)*, Cambridge Univ. Press, vol. 21, no. 3, pp. 477-495, 2015. Doi: [10.1017/S1351324913000284](https://doi.org/10.1017/S1351324913000284).
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- (25) **A. Azmi** and A. Al-Ssulami, “Discovering Common Recurrent Patterns in Multiple Strings over Large Alphabets”, *Pattern Recognition Letters (PR Let)*, Elsevier, vol. 54, pp. 75-81, 2015. Doi: [10.1016/j.patrec.2014.12.009](https://doi.org/10.1016/j.patrec.2014.12.009).
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- (27) **A. Azmi**, F. Alkhalifah, A. Alsaeed and Y. Barnawi, “Using Non-Conventional Search Schemes to Retrieve Hadiths,” *The 5th Int. Conf. on Arabic Language Processing (CITALA '14)*, Oujda, Morocco, 26-27 Nov., 2014.
- (28) **A. Azmi** and N. AlShenaifi, “Handling ‘Why’ Questions in Arabic,” *The 5th Int. Conf. on Arabic Language Processing (CITALA '14)*, Oujda, Morocco, 26-27 Nov., 2014.

- (29) **A. Azmi** and A. Alsaiari, “A Calligraphic Based Scheme to Justify Arabic Text Improving Readability and Comprehension”, *Computers in Human Behavior (CHB)*, Elsevier, vol. 39, pp. 177-186, 2014. Doi: [10.1016/j.chb.2014.07.003](https://doi.org/10.1016/j.chb.2014.07.003).
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- (31) **A. Azmi** and S. Alzanin, “Aara’ – A System for Mining the Polarity of Saudi Public Opinion through e-Newspaper Comments”, *J Information Science (JIS)*, Sage Publication, vol. 40, no. 3, pp. 398-410, 2014. Doi: [10.1177/0165551514524675](https://doi.org/10.1177/0165551514524675)
- (32) A.I Al-Ghadir, A. Alabdullatif and **A. Azmi**, “Gender Inference for Arabic Language in Social Media”, *Int J Knowledge Society Research (IJKSR)*, IGI, vol. 5, no. 4, pp. 1-10, 2014. Doi: [10.4018/IJKSR.2014100101](https://doi.org/10.4018/IJKSR.2014100101).
- (33) **A. Azmi** and A. Alsaiari, “An Algorithm to Justify Arabic Text”, *Egyptian Computer Society Journal (ECS J)*, vol. 37, no. 5, 2013.
- (34) **A. Azmi** and S. Al-Thanyyan, “A Text Summarizer for Arabic”, *Computer Speech and Language (CSL)*, Elsevier, vol. 26, no. 4, 2012. Doi: [10.1016/j.csl.2012.01.002](https://doi.org/10.1016/j.csl.2012.01.002).
- (35) **A. Azmi** and N. bin Badia, “Mining and Visualizing the Narration Tree of Hadiths (Prophetic Traditions),” in: C. Boonthum-Denecke, P.M. McCarthy and T. Lamkin (Eds), *Cross-Disciplinary Advances in Applied Natural Language Processing: Issues and Approaches*, IGI Global, 2012. Doi: [10.4018/978-1-61350-447-5](https://doi.org/10.4018/978-1-61350-447-5).
- (36) **A. Azmi** and N. bin Badia, “e-Narrator – An Application for Creating an Ontology of Hadiths Narration Tree Semantically and Graphically”, *The Arabian Journal for Science and Engineering (AJSE)*, vol. 35, no. 2C, December 2010, pp. 51-68.
- (37) **A. Azmi** and N. bin Badia, “iTree – Automating the Construction of the Narration Tree of Hadiths (Prophetic Traditions),” *The 6th IEEE Int. Conf. on Natural Language Processing and Knowledge Eng. (IEEE NLP-KE 2010)*, Beijing, China, 21-23 Aug., 2010.
- (38) **A. Azmi**, N.M. Alsabhan, and M.S. Aldosari, “The Wiimote with SAPI: Creating an Accessible Low-Cost Human Computer Interface for the Physically Disabled”, *International Journal of Computer Science and Network Security (IJCSNS)*, vol. 9, no. 12, December 2009, pp. 63-68.
- (39) **A. Azmi** and A. Alsaiari, “Arabic Typography: A Survey”, *International Journal of Electrical & Computer Sciences (IJECS)*, vol. 9, no. 10, December 2009, pp. 16-22.
- (40) **A. Azmi** and S. Al-Thanyyan, “Ikhtasir – A User Selected Compression Ratio Arabic Text Summarization System,” *The 5th IEEE Int. Conf. on Natural Language Processing and Knowledge Eng. (IEEE NLP-KE '09)*, Dalian, China, 24-27 Sep., 2009.

**Professional development**

October 2009: Effective Use of Smart Classrooms (1 day).