

PROFESSIONAL

2020 – Present	Director of the AI Center and Chair of the Software Engineering Department College of Engineering at Alfaisal University , Riyadh Saudi Arabia
2018 - 2020	Data Scientist , National Center for Artificial Intelligence (AI) and Data Analytics King Abdulaziz City for Science and Technology , Riyadh, Saudi Arabia
2019 –2020	Executive Director of IP Enablement , Saudi Authority for Intellectual Property (SAIP)
2013 –2019	Principal Investigator , Center for Complex Engineering Systems (CCES) at KACST and MIT Technology Leaders Program in KACST's Joint Centers of Excellence (TLP) King Abdulaziz City for Science and Technology , Riyadh, Saudi Arabia
2016 –2019	Research Affiliate , MIT Institute for Data, Systems and Society (IDSS) Massachusetts Institute of Technology , MIT, Cambridge, USA
2015 –2016	<i>Research Scholar and Ibn Khaldun Postdoctoral Fellow</i> , Ideation Lab (Ideation) School of Engineering, Massachusetts Institute of Technology , MIT, Cambridge, USA
2014 –2015	<i>Vice-Dean of Academic Affairs</i> , Prince Sultan University's College for Women (PSU) Assistant Professor, Software Engineering MSc Program, College of Computer Science Prince Sultan University , Riyadh Saudi Arabia (<i>One-Year Secondment from KSU</i>)
2012 –2014	<i>Vice-Chair</i> , Department of Software Engineering (SE) College of Computer and Information Sciences King Saud University , Riyadh, Saudi Arabia
2012 - 2013	<i>Honorary Research Fellow</i> , School of Engineering and Digital Arts (EDA) University of Kent , Canterbury, England, United Kingdom
2011 – 2012	<i>Acting Vice-Chair</i> , Department of Software Engineering (SE) College of Computer and Information Sciences King Saud University , Riyadh, Saudi Arabia
2010 – 2015	<i>Assistant Professor</i> , College of Computer and Information Sciences (CCIS) Information Technology Dep (2010-2012) and Software Engineering Dep (2012-2015) King Saud University , Riyadh, Saudi Arabia
2005 – 2006	<i>Teaching Assistant</i> , School of Informatics, MSc in Human-Centered Systems Program (HCID) Center for HCI Design , City University of London, England, U.K.
2002 – 2004	<i>Lecturer</i> , College of Computer and Information Sciences (CCIS) Prince Sultan University , Riyadh, Saudi Arabia
2000 – 2002	<i>Research Associate</i> , UT-Houston; DBA of NIH Epidemiology Research Project (UTHealth) University of Texas , Health Science Center UT-Houston; Texas, U.S.A
1995 – 1996	Instructor, New Horizons Training Centers of AlManahil in the Diplomatic Quarters Al-Khaleej Training & Electronics Industries , Riyadh, Saudi Arabia

EDUCATION

2015-2016	Postdoc Fellowship School of Engineering, MIT, Cambridge Massachusetts, USA (Engineering)
2005-2009	PhD Computer Science Centre for Human-Computer Interaction HCI Design (HCID) School of Informatics, City University London, England, United Kingdom PhD thesis in Web Accessibility, HCI, and Assistive Technology for Disabilities
1998-2000	MEM Master of Engineering Management The George Washington University (GWU) School of Engineering and Applied Sciences, Washington D.C., USA Majoring in Software Engineering & Information Systems Management
1997-1998	MSc Master of Science in Computer Science The George Washington University (GWU) School of Engineering and Applied Sciences, Washington D.C., USA Majoring in Computer Graphics and Multimedia Systems
1991-1995	BSc Computer Applications King Saud University (CCIS) College of Computer and Information Sciences, Riyadh, Saudi Arabia

AWARDS

- 2018 **Envision the Future Award**, the Dell-EMC Industry Alliance Award for the Middle East and Turkey | Dell-EMC Annual Technology Forum at GITEX in Dubai, UAE. (جائزة الاستشراف التقني)
- 2015 **Visionary Award**, the SAP Academic Alliance for the Middle East, Europe and North Africa | SAP Academic Alliance Conference, Waldorf – Heidelberg, Germany. (جائزة القيادة والرؤية الاستشرافية – التحالف الأكاديمي والصناعي)
- 2014 **King Abdullah Award; King's Ambition for a Nation's Future (KANF)**, Brain-Computer Systems for Dyslexia, King Saud University's Intellectual Property and Technology Licensing Program. (جائزة طموح ملك لمستقبل وطن)
- 2013 **Academic Excellence Award** for Faculty | Women in Higher Education Symposium: Growth to Competition (SWHES) held in Jan 2013; King Saud University, Riyadh, Saudi Arabia. (جائزة التميز الأكاديمي)
- 2013 **Student Choice Award** for Faculty in Computing | Women in Higher Education Symposium: Growth to Competition (SWHES) held in Jan 2013; King Saud university, Riyadh. (جائزة اختيار الطلبة لأعضاء هيئة التدريس)
- 2012 **Honorary Fellowship Award**: Summer Grant Program at KACST for the NHS Project of Brain-Computer Interfaces for Clinical Patients with Neurological and Motor Disabilities | Honorary Fellowship in the School of Engineering, University of Kent. (الزمالة الفخرية بكلية الهندسة بجامعة كنت في إنجلترا)
- 2010 **IEEE Foundation Grant Award #2010-038** STEM Workshops for Promoting Computer Science Careers for Senior High School Female Students in Saudi Arabia. (جائزة المؤسسة الخيرية لمعهد المهندسين الدولي)
- 2006 **Academic Achievement Award** for PhD Students; Saudi Arabian Cultural Bureau in the United Kingdom. London, United Kingdom (PhD Degree).
- 1998 **Academic Achievement Award** for MSc Students; Saudi Arabian Cultural Bureau in the USA. Washington D.C., USA (MSc Degree).

CERTIFICATIONS

- 2016 MIT Sloan Certification in **Management and Leadership**, MIT Sloan School of Management, Cambridge, USA. Scope in Managing Complex Systems, Strategy and Innovation, and Maximizing Productivity.
- 2018 MIT Hacking Medicine Institute's Regional Representative for **Digital Health Innovation** Hackathons.
- 2019 MIT Sloan Certification in **Strategy and Innovation**, MIT Sloan School of Management, Cambridge, USA

FUNDED RESEARCH PROJECTS

- 2013 Co-Investigator. *Stroke and Myocardial Infarction* Resource Allocation Tool (SMART), **King Fahad Medical City (KFMC)**. PIs from the Ministry of Health and the HCI Lab. Time period: 2013-2017.
- 2013 Co-Investigator (Thesis Supervisor). *Neuro-Rehabilitation of Stroke and ADHD with Sustained Attention Assessment*, **KACST GDRG** Project. Funding awarded to MSc Student, Layla Alsalhei at KFSHRC.
- 2013 Co-Investigator, *Novel Efficient Algorithms and Tools for Motif Localization and Discovery* (NeatMLD) on a Genome Scale, **King Abdulaziz City for Science and Technology** NPST Grant in Bioinformatics. PI: Dr Ghada Badr. Time period: 2 years; 2013-2015.
- 2013 Co-Investigator of KSU RC Research Center RC#121241 *Optimized Arabic Keyboard for Single-Pointer Keying Applications*. PI: Dr Abir Benabid, Co-PI: Dr Manar Fawzi. Time period 8 months; Mar 2013.
- 2013 Co-Investigator KSU RC Research Center RC#121264 *NeuroPlace: Making Sense of a Place*, PI: Dr. Eiman Kanjo. Time period: 8 months; Mar 2013.
- 2012 Principal Investigator, HCI Research Group RGP-VPP-157, **Deanship of Scientific Research**, KSU, 2012-2014.
- 2011 Co-Investigator, Project: *Developing Screening Programs for Learning Difficulties in Arabic Normalized to the Saudi Population*. Deanship of Scientific Research, **Taibah University & Ministry of Education**. PI: Dr. Hessah Al-Musaaed (Taiba), Co-PI: Dr Maha Alsheaha (KSU). Time Period: Dec 2010-Apr 2012.
- 2007 Co-Investigator, Project: Predictors of Faculty Internet Usage in Saudi Arabian Universities. **King Abdulaziz City for Science and Technology**, Grant 60-27-100. PI: Dr. Amany Alshawi. Time period: 1 year; Jan 2006 - Jan 2007.
- 2009 Co-Investigator, Project: Usability Evaluations of the Mawhiba Portal. King Abdulaziz Foundation for Giftedness and Creativity (**Mawhiba**). PI: Dr. Hend Al-Khalifa. Time period: Jan 2009 - Apr 2009.

PUBLICATION PROFILE



ORCID ID



ORCID.ORG/2-3756-5721

DBLP.UNI-TRIER.DE/ALWABIL

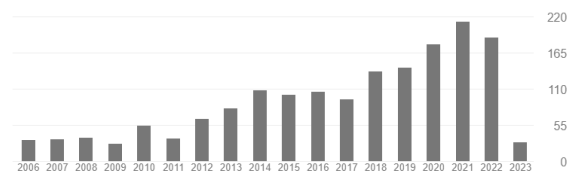


Google
Scholar

H-index 19

i10-index 36

Citations per year



JOURNAL PUBLICATIONS

Abeer Benabid, **Areej Al-Wabil**, Manar Hosny, Weaám AlRashed, and Arwa Alrubaian (2021). *Usability Evaluation of Optimized Single-pointer Arabic Keyboards using Eye Tracking*. Advances in Human-Computer Interaction 2021 (2021): 1-14.

Alasmari, Ashwag, Aseel Addawood, Mariam Nouh, Wajanat Rayes, and **Areej Al-Wabil** (2021). *A Retrospective analysis of the COVID-19 infodemic in Saudi Arabia*. Future Internet 13, no. 10 (2021): 254.

Abeer Al-Nafjan, Manar Hosny, Yousef Al-Ohali, **Areej Al-Wabil** (2017). *Review and Classification of Emotion Recognition Based on EEG Brain-Computer Interface System Research: A Systematic Review*. Applied Sciences, 7(12), 1239.

Abeer Al-Nafjan, **Areej Al-Wabil**, Abdulaziz AlMudhi, Manar Hosny (2018). *Measuring and Monitoring Emotional Changes in Children who Stutter*. Computers in Biology and Medicine, 102, pp. 138-150. [Impact Factor **2.168**]

Sharifa Alghowinem, Roland Goecke, Michael Wagner, and **Areej Alwabil** (2019). *Evaluating and Validating Emotion Elicitation using English and Arabic Movie Clips on a Saudi Sample*. Sensors 19, no. 10 (2019): 2218.

Ghada Al-Hudhud, Mai Alzamel, Eman Alattas, **Areej Al-Wabil** (2014). *Using Brain Signal Patterns for Biometric Identity Verification Systems*, Journal of Computers in Human Behavior, Vol 31, pp. 224-229. [ISI Journal; Impact Factor **2.273**]

Mashaal Al-Saleh, **Areej Al-Wabil** (2012). *User Modeling in Web Transactional Tasks: Visual and Behavioral patterns*. Journal of Computing, Volume 4, Issue 3, March 2012.

Amany Alshawhi, **Areej Al-Wabil** (2012). *Internet Usage by Faculty in Saudi Higher Education*. International Journal of Computer Science Issues IJCSI, Vol 10, Issue 3, No. 2, pp. 81-87, May 2013.

Andrew MacFarling, **Areej Al-Wabil**, Chloe Marshall, Asaad Albrair, Panayiotis Zaphiris (2010). *The Effect of Dyslexia on Information Retrieval: an Exploratory Study*. Journal of Documentation, Vol 66, Issue 3, pp. 307 - 326. [Impact Factor **1.058**]

Areej Al-Wabil, Melinda Cox, W. Scott Burgin, Lemeul Moye, Lewis Morgenstern (2003). *Improving Efficiency of Stroke Research*. Journal of Clinical Epidemiology. Volume 56, pp. 351-357. [Impact factor **4.271**]

Paisith Piriawat, Miriam Šmajsová, Melinda A. Smith, Sanjay Pallegar, **Areej Al-Wabil**, Nelda M. Garcia, Jan M. Risser, Lemuel A. Moyé, and Lewis B. Morgenstern (2002). *Comparison of Active and Passive Surveillance for Cerebrovascular Disease: The Brain Attack Surveillance in Corpus Christi (BASIC) Project*. American. Journal of Epidemiology. (2002) 156(11): 1062-1069 [Impact Factor **5.216** - Highly Cited Paper]

Lewis Morgenstern, Melinda Smith, L. Lisabeth, Jan Risser, Ken Uchino, Nelda Garcia, P. Longwell, D. McFarling, O. Akuwumi, **Areej Al-Wabil**, Fahmi Al-Senani, D. Brown, Lem Moyé (2004). *Excess stroke in Mexican Americans compared with non-Hispanic whites: The Brain Attack Surveillance in Corpus Christi (BASIC) Project*. American Journal of Epidemiology, volume 160(4), pp. 376-383. [Impact Factor **5.216**— Highly Cited Paper]

L. Lisabeth, J. Risser, D. Brown, F. Al-Senani, K. Uchino, M. Smith, N. Garcia, P. Longwell, D. McFarling, A. **Al-Wabil**, O. Akuwumi, L. Moyé, L. Morgenstern (2006). *Stroke Burden in Mexican Americans: The Impact of Mortality Following Stroke*, Annals of Epidemiology, Vol 16, Issue 1, Pages 33-40. [Impact Factor **3.215**].

COUNCILS AND BOARDS

- 2021-22 Advisory Board for Technical and Vocational Training Colleges (TVTC)
- 2018-20 Advisory Board, Princess Noura University, Riyadh, Saudi Arabia
- 2017-20 Board Member, IEEE Women in Engineering Saudi Chapter, Saudi Arabia
- 2014 University Council, **Prince Sultan University** | College Councils (College of Engineering, College of Computer and Information Science, College of Business Administrations, PSUCW), Prince Sultan University
- 2013 College Council and Software Engineering Department Council, College of Computer and Information Sciences, **King Saud University**

TECHNICAL REPORTS

- Jan 2013 Areej Al-Wabil. *BCI in Environmental Control for Patients with Neuromotor Disabilities, KACST Summer Grant Program* | Visiting Scholar report on research conducted in collaboration with NHS in the UK and the School of Engineering in the University of Kent.
- May 2009 Areej Al-Wabil, Hend Al-Khalifa. *Usability Evaluations of the Mawhiba Web Portal*. User Experience Project, King Abdulaziz Foundation for Giftedness and Creativity (Mawhiba).
- Jan 2007 Amany Alshawhi, Areej Al-Wabil. *Internet Usage by Faculty in Saudi Higher Education*. Final Report 60-27-100, King Abdulaziz City for Science and Technology.

TECHNOLOGY LICENSING AND PATENTS

- Jan 2023 Assistive Technology for Tremor (Industrial Design) Filed via SAIP.
- May 2012 Touch-to-Speak iOS Application for Augmentative and Alternative Communication. ISBN 978-603-507-071-3, [KSU IPTL](#); Registered at King Fahad National Library [#9964/1433](#).
- Feb 2013 Arabic Script Gaze-Typing Virtual Keypad. Patent filed via KSU IPTL.

PUBLICATIONS

2015-2017 CONFERENCE PUBLICATIONS [Listed in DbLP](#)

2014 CONFERENCE PUBLICATIONS

Wafa Alrajhi, Manar Hosny, **Areej Al-Wabil**, Arwa Alabdulkarim (2014). *Human Factors in the Design of BCI-Controlled Wheelchairs*. In the proceedings of the 16th Human-Computer Interaction HCI International Conference HCI2014, Advanced Interaction Modalities and Techniques, Lecture Notes in Computer Science Volume 8511, 2014, pp 513-522.

Sahar Alkhashrami, Huda Alghamdi, **Areej Al-Wabil** (2014). *Human Factors in the Design of Arabic-Language Interfaces in Assistive Technologies for Learning Difficulties*. In the proceedings of the 16th Human-Computer Interaction HCI International Conference HCI2014, Advanced Interaction Modalities and Techniques, Lecture Notes in Computer Science Volume 8511, 2014, pp 362-369.

Sharifa Alghowinem, Sarah Alghuwinem, Majdah Alshehri, **Areej Al-Wabil**, Roland Goecke, Michael Wagner (2014). *Design of an Emotion Elicitation Framework for Arabic Speakers*. In the proceedings of the 16th HCI International Conference HCI2014, Advanced Interaction Modalities and Techniques, Lecture Notes in Computer Science Volume 8511, 2014, pp 717-728.

Salma Aldawood, Faisal Aleissa, Riyadh Alnasser, Anas Alfari, **Areej Al-Wabil** (2014). *Interaction Design in a Tangible Collaborative Decision Support System: The City Schema DSS*. In the proceedings of the 16th Human-Computer Interaction HCI Conference HCI2014, Communications in Computer and Information Science Volume 435, 2014, pp 508-512.

Layla Al-Salhie, Mona Al-Zuhair, **Areej Al-Wabil** (2014). *Multimedia Surveillance in Event Detection: Crowd Analytics in Hajj*. In the proceedings of the 16th Human-Computer Interaction HCI International Conference HCI2014; Design,

User Experience, and Usability Thematic Area: User Experience Design for Diverse Interaction Platforms and Environments, Lecture Notes in Computer Science Volume 8518, 2014, pp 383-392.

Arwa Al-Rubaian, Lama Alssum, Rawan Alharbi, Wafa Alrajhi, Haifa Aldayel, Nora Alangari, Hadeel Al-Negheimish, Aljohara Alfayez, Sara Alwaalan, Rania Aljindan, Ashwag Alshathri, Dania Alomar, Ghada Alhudhud, **Areej Al-Wabil** (2014). *The Design and Development of Empathetic Serious Games for Dyslexia: BCI Arabic Phonological Processing Training Systems*. In the proceedings of the 16th HCI International Conference HCII2014; Design, User Experience, and Usability Thematic Area; User Experience Design Practice, Lecture Notes in Computer Science Volume 8520, 2014, pp 105-112.

Areej Al-Wabil, Abdullah Sharaf Alghamdi, Nora Aldahash (2014). *Software Engineering Education: The King Saud University Experience*. In the proceedings of the 8th International Technology, Education and Development Conference, March 2014, Valencia, Spain. ISBN: 978-84-616-8412-0.

2013 CONFERENCE PUBLICATIONS

Arwa Al-Edaily, **Areej Al-Wabil**, Yousef Al-Ohali (2013). *Dyslexia Explorer: A Screening System for Learning Difficulties in the Arabic Language Using Eye Tracking*, A. Holzinger et al. (Eds.): SouthCHI 2013, LNCS 7946, pp. 831–834, 2013. Springer-Verlag Berlin Heidelberg 2013.

Ashwag Al-Shathri, **Areej Al-Wabil**, Yousef Al-Ohali (2013). *Eye-Controlled Games for Behavioral Therapy of Attention Deficit Disorders*, In the proceedings of the 15th Human-Computer Interaction HCI International Conference HCII2013, In C. Stephanidis (Ed.): Part I, HCII 2013, CCIS 373, pp. 574-578. Springer, Heidelberg.

Arwa Al-Edaily, **Areej Al-Wabil**, Yousef Al-Ohali (2013). *Interactive Screening for Learning Difficulties: Analyzing Visual Patterns of Reading Arabic Scripts with Eye Tracking*, Proceedings of 15th HCI International Conf; in C. Stephanidis (Ed.) Part II, HCII 2013, CCIS 374, pp. 3-7. Springer, Heidelberg.

Bayan Alarifi, Arwa Alrubaian, Ghada Alofisan, Nora Alromi, **Areej Al-Wabil** (2013). *Towards an Arabic Language Augmentative and Alternative Communication Application for Autism*, In proceedings of HCI International 2013 (HCII2013), A. Marcus (Ed.): DUXU/HCI 2013, Part II, LNCS 8013, pp. 333-341. Springer, Heidelberg (2013).

Dania Al-Omar, **Areej Al-Wabil**, Manar Hosny (2013). *Using Pupil Size Variation during Visual Emotional Stimulation in Measuring Affective States of Non-Communicative Individuals*, In C. Stephanidis and M. Antona (Eds.): UAHCI/HCI 2013, Part II, LNCS 8010, pp. 253–258. Springer-Verlag Berlin Heidelberg.

Najwa Alghamdi, Ghada Alhudhud, Mai Alzamel, **Areej Al-Wabil** (2013). *Trials and Tribulations of Brain-Computer Interfaces*, In proceedings of the Science and Information Conference The SAI, London, UK Oct 2013. Published by IEEE CPS.

Aljawharah Al-Abdullatif, Hadeel Al-Negheimish, Latifah Al-Mofeez, Nuha Al-Khalifa, Lama Al-Andas, **Areej Al-Wabil** (2013). *Mind-Controlled Augmentative and Alternative Communication for People with Severe Motor Disabilities*, in proceedings of the 9th International Conference on Innovations in Information Technology, UAE, Mar 17, 2013. Published by IEEE CPS.

Heila Almazrou, Noura Alzamel, Rawan Alwabil, Hala Almuhanha, Lubna Alhinti, **Areej Al-Wabil** (2013). *Technology for Psychosocial Interventions for Individuals with Alzheimer's: Reminiscence Therapy and Monitoring Progressive Decline of Cognitive Abilities*, In proceedings of the Science and Information Conference SAI, London, UK Oct 2013. Published by IEEE CPS.

Arwa Alamoudi, Modhi Almozainy, Rawan Alabdulrahman, Sara Alkoblan, Sarah Drine, **Areej Al-Wabil** (2013). *Interactive Serious Gaming for Children with Auditory Processing Difficulties in the Arabic Language*, In the proceedings of the 15th Human-Computer International HCII2013, USA. Published by Springer CCIS.

Hadeel Al-Negheimish, Lama Alandas, Latifah Al-Mofeez, Aljawharah Al-Abdullatif, Nuha Al-Khalifah, **Areej Al-Wabil** (2013). *Brainwave Typing: Comparative Study of P300 and Motor Imagery for Typing Using Dry-Electrode EEG*

Devices, In the proceedings of the 15th Human-Computer International HCI2013, Communications in Computer and Information Science Volume 373, 2013, pp 569-573.

Nora Alhakbani, Rana AlMurshad, Ebtisam Alabdulqader, Majdah Alshehri, Alaa Alothman, Areej Al-Wabil (2013). *Patterns of Computer-Mediated Communication: Youth, Identity, and mobile Devices*. In the proceedings of the 6th International Conference of Education, Research and Innovation, Valencia, Spain. ISBN: 978-84-616-3847-5

2012 CONFERENCE PUBLICATIONS

Areej Al-Wabil, Arwa Al-Issa, Itisam Hazzaa, May Al-Humaimeedi, Lujain Al-Tamimi, and Bushra Al-Kadhi (2012). *Optimizing Gaze Typing for People with Severe Motor Disabilities: The iWriter Arabic Interface*. In Proceedings 14th international ACM SIGACCESS Conf on Computers and accessibility (ASSETS '12). ACM, New York, NY, USA, 261-262. DOI=10.1145/2384916.2384983

Areej Al-Wabil, Amandeep Dhir, Hessah Al-Musaaed, Maha Al-Sheaha (2012). *Screening Program for Learning Difficulties in Arabic Speaking Students: Design Considerations for Educational Interfaces*. Interaction Design in Educational Environments ICEIS 2012 in Wrotaw, Poland, June 2012.

Areej Al-Wabil, Sara Drine, Sara Alkoblan, Arwa Alamoudi, Rawan Al-Abdulrahman, Modhi Almuzainy (2012). *The Use of Personas in the Design of an Arabic Auditory Training System for Children*. In proceedings of the 13th International Conference on Computers Helping People with Special Needs (ICCHP 2012) in the Universal Learning Design (ULD) track; Linz, Austria, July 2012.

Mashael Al-Saleh, **Areej Al-Wabil**, Alia Alabdulkarim, Eman Alattas, Mousmi Chaurasia, Reem Alfify (2012). *Inline Immediate Feedback in Arabic Web Forms: An Eye Tracking Study of Transactional Tasks*, In proceedings of the 8th International Conference on Innovations in Information Technology (IIT 2012), pp.333,338, United Arab Emirates, 18-20 March 2012 | DOI: 10.1109/INNOVATIONS.2012.6207761n

Areej Al-Wabil, Anfal Alomar, Khawla Alhadlaq, Manal Alrubayain, Najla Alzakari, Ohood Alhamid (2012). *Interactive Therapy of ADHD with Gaze-Based Games*. Poster presentation in the 10th Pacific Conference of Computer Human Interaction (APCHI) in Matsua, Japan, August 2012. ACM SIGCHI.

Areej Al-Wabil, Ghada Alofisan, Arwa Alrubaian, Amani Musrea, Bayan Alarifi, Nora Alromi (2012). *Designing Augmentative and Alternative Communication for Autism and Stroke: Touch-to-Speak iOS Applications*. Poster presentation in the 10th Pacific Conference of Computer Human Interaction (APCHI) in Matsua, Japan, August 2012. ACM SIGCHI.

Areej Al-Wabil, Bushra Al-Kadhi, Arwa Al-Issa, May Alhumaimedi, Etessam Al-Hazza, Lujain Al-Tamimi (2012). *Gaze-Communication for Individuals with Severe Motor Disabilities: The iWriter Arabic Eye Typing System*. Poster presentation in the 10th Pacific Conference of Computer Human Interaction (APCHI) in Matsua, Japan, August 2012. ACM SIGCHI.

2010-2011 CONFERENCE PUBLICATIONS

Areej Al-Wabil, Mashael Al-Saleh (2011). *Modeling Users in Web Transactional Tasks with Behavioral and Visual Exploration Patterns*, In proceedings of the 14th International Conference on Human-Computer Interaction (HCI2011), Orlando, Florida, July 9-14, 2011. Communications in Computer and Information Science (CCIS) series, pp. 260-264, Springer, Heidelberg (2011) | [DOI](#)

Hala Almuhanha, Rawan Alwabil, Heila Almazrou, Nora Alfadhel, **Areej Al-Wabil** (2011). *An Interactive Multimedia System for Monitoring the Progressive Decline of Memory in Alzheimer's Patients*. In proceedings of the 14th International Conference on Human-Computer Interaction (HCI2011), Orlando, Florida, July 9-14, 2011. Springer Communications in Computer and Information Science (CCIS) series, pp. 381-385.

Areej Al-Wabil, Maha Al-Sheaha, Hessa Al-Mussaied, Remya P. George (2011). *Interactive Screening for Learning Difficulties in Arabic-Speaking Children*. In Proceedings of World Conference on E-Learning in Corporate, Government, Healthcare, and Higher Education 2011 (pp. 2299-2303). Chesapeake, VA: AACE.

Areej Al-Wabil, Maha Al-Sheaha (2010). *Towards an Interactive Screening Program for Developmental Dyslexia: Eye Movement Analysis in Reading Arabic Texts*. In proceedings of the 12th International Conference on Computers Helping People with Special Needs, Miesenberger, K. et al. (Eds.): ICCHP 2010, LNCS 6180, pp. 25-32.

Areej Al-Wabil, Hadeel Al-Shabanat, Rawan Al-Sarrani, Manal Al-Khonin, Fatmah AlQhtani (2010). *Developing a Multimedia Environment to Aid in Vocalization for People on the Autism Spectrum: A User-Centered Design Approach*. In proceedings of 12th International Conference on Computers Helping People with Special Needs ICCHP, Miesenberger, K. et al. (Eds.): ICCHP 2010, LNCS 6180, pp.33-36.

Latifa Al-Abdulkareem, **Areej Al-Wabil**, Maha Al-Yahya, Abeer Al-Humaimeedy, Sara Al-Khudair (2010). *Methodological Considerations for Involving SpLD Practitioners in the Design of Interactive Learning Systems*. In the proceedings of the 12th International Conference on Computers Helping People with Special Needs ICCHP, Miesenberger, K. et al. (Eds.): ICCHP 2010, LNCS 6180, pp. 1-4.

2000-2009 CONFERENCE PUBLICATIONS

Areej Al-Wabil. (2009). *Visual Attention of Dyslexics on the Web: Evidence from Eye Tracking*. In proceedings of the 3rd International Conference on Disability and Rehabilitation. Riyadh, Saudi Arabia, March 2009.

Areej Al-Wabil, Panayiotis Zaphiris, Stephanie Wilson (2008). *Examining Visual Attention of Dyslexics on Web Navigation Structures with Eye Tracking*. In proceedings of Innovations in Information Technology, IEEE CNF pp.717-721. Al-Ain, UAE, Dec 2008.

Areej Al-Wabil, Amany Al-Shawi, Zainab Alshankity, Khawla Al-Wehaibi, Buthayna Al-Wehaibi (2008). *Internet Utilization by Faculty in Saudi Arabian Universities: Differences Based on Academic Discipline*. In proceedings of the International Technology, Education, and Development Conference. Valencia, Spain, March 2008.

Khawla Al-Wehaibi, **Areej Al-Wabil**, Amany Alshawi, Zainab Alshankity (2008). *Barriers to Internet Adoption among Faculty in Saudi Arabian Universities*. In proceedings of the World Conference on Educational Multimedia, Hypermedia, and Telecommunications. Vienna, Austria, July 2008.

Areej Al-Wabil, Panayiotis Zaphiris, Stephanie Wilson (2007). *Web Navigation for Individuals with Dyslexia: An Exploratory Study*. In proceedings of the 12th International Conference on Human-Computer Interaction, C. Stephanidis (Ed.): Universal Access in HCI, Part I, HCII, LNCS 4554, pp. 593–602. Beijing, China, July 2007.

Areej Al-Wabil, Hend Al-Khalifa, Wafa Al-Saleh (2007). *Arabic Text-To-Speech Synthesis: A Preliminary Evaluation*. In C. Montgomerie & J. Seale (Eds.), In proceedings of the World Conference on Educational Multimedia, Hypermedia and Telecommunications 2007 (pp. 4423-4430). Vancouver, Canada, June 2007.

Areej Al-Wabil, Panayiotis Zaphiris, Stephanie Wilson (2006). *Web Design for Dyslexics: Accessibility of Arabic Content*. In proceedings of the International Conference on Computers Helping People with Special Needs, Miesenberger, K. et al. (Eds.): ICCHP 2006, LNCS 4061, pp. 817 – 822. Linz, Austria, July 2006.

Areej Al-Wabil, Hend Al-Khalifa (2006). *Assistive Technologies for Users with Specific Learning Difficulties*. In proceedings of the International Conference on Learning Disabilities. Riyadh, Saudi Arabia, November 2006.

Areej Al-Wabil, Yanko Michea, Karen Pancheri, Lewis Morgenstern (2002). *Artificial Neural Networks in Stroke Surveillance: The Brain Attack Surveillance in Corpus Christi (BASIC) Study*. In proceedings of the American Medical Informatics Association (AMIA) Symposium. San Antonio, Texas, November 2002.

Areej Al-Wabil, Melinda Cox, W. Scott Burgin, Lemeul Moye, Lyn Steffen, Taha Kass-Hout, Lewis Morgenstern (2000). *Can A Computer or Abstractor Diagnose Stroke as well as a Stroke Neurologist? The Brain Attack Surveillance in Corpus Christi (BASIC) Study*. In proceedings of the American Academy of Neurology Conference. Philadelphia, Pennsylvania, May 2000.

WORKSHOP PRESENTATIONS

- Apr 2015 *Intellectual Property, Licensing and Technology Transfer: Harnessing Scientific Advances for the Benefit of Society* | Research Serving the Society Exhibit (ملتقى بحثي لمجتمعي) Prince Sultan University.
- Oct 2014 *Leveraging Social Media in Scientific Research* | King Salman Center for Research and Translation, Prince Sultan University (PSU), KSA.
- May 2012 *Research Funding in Local, Regional and Global Contexts: Opportunities and Challenges for Research in Computing* | Deanship of Scientific Research, Princess Nora University (**PNU**), KSA.
- Dec 2011 *Funding Research Projects in Computer Science*. Presented in Imam Mohammed bin Saud Islamic University (**ImamU**), College of Computer Sciences; Riyadh, Saudi Arabia.
- Jan 2011 *Dyslexia in Arabic-Speaking Populations: Challenges and Technology Support*. Presented in Prince Salman's Center for Disability Research (**PSCDR**), Riyadh, Saudi Arabia.
- Mar 2009 *Recent Advances in Eye Tracking Methodology and Technologies*. Presented in the Meeting of the Minds Workshop | Prince Salman Research Center; Prince Sultan University (**PSU**), KSA.
- Feb 2008 *Eye Tracking Dyslexic Web Users: A Case Study*. Presented in the Eye Tracking Workshop for Usability Consultants at the Centre for HCI Design | **Vodafone Interaction Lab**; London, U.K.
- Jan 2006 *Designing Arabic e-Content for Dyslexics*. Workshop organized and presented in coordination with the Saudi Arabian Ministry of Education | MOE **Secretariat of Special Education**, Learning Disabilities Unit; Riyadh, Saudi Arabia.
- Apr 2005 *Developing eLearning Platforms*. Workshop presented in the Third Annual Symposium on Learning & Technology | **Effat University**; Jeddah, Saudi Arabia.

INVITED LECTURES AND CONTRIBUTED TALKS

- Apr 2018 **Keynote** in the 16th International Conference of the Faculty of Economics and Administrative Sciences at Jordan's **Applied Sciences University** w/ Jordan's Minister of Higher Education | Topic: Blockchain Technologies
- Apr 2015 **Information Technology IT Series** Keynote Speech: Embodied Interaction Design | Organized by the Deanship of IT at **Imam University** | Topic: Human-Computer Interaction Design: Brain, Body & Bytes.
- May 2014 Keynote speaker in the **Advances in Software Engineering** Conference | Organized by **Prince Sultan University** | Topic: Conceptual Foundations of Software Engineering in Embodied Interaction Design
- Apr 2013 Keynote speaker in the **Google 2013 Women in Computing** Conference in Saudi Arabia | Organized by Google Student Ambassadors in **King Saud University** | Topic: Persuasive & Pervasive Computing.
- May 2013 *Assistive Technologies for Learning Difficulties* | Invited Talk in the World Day for Learning Disabilities | Hosted by King Saud University's **Disability Service Center (DSC)** in Riyadh, KSA.
- Jan 2013 *Eye Tracking and Brainwave Technologies for Cognitive Disabilities* | Invited Session in the Psychiatry Department of the **National Guard Hospital (NGHA)**, Riyadh, KSA.
- Nov 2010 *Interaction Design*. Lecture presentation in the 2nd meeting of TechLadies, hosted by **Badir Technology Incubators** in King Abdulaziz City for Science and Technology (KACST).
- Jan 2009 *Usability and Accessibility of the Web*. Lecture presented at the Web Applications Engineering course in the Information Technology Department of the College of Computer and Information Sciences, **King Saud University**. Riyadh, Saudi Arabia.
- Apr 2008 *Dyslexia and Web Interaction: Examining Visual Attention on Web Navigation Structures with Eye tracking*. Lecture presented in the School of Computing, Mathematical and Information Sciences, **University of Brighton**. Brighton, UK.
- Nov 2007 *Web Design for Dyslexics*. Invited talk presented in the Dyslexia and Entrepreneurship Conference in association with the British Dyslexia Association, City University London, **CASS Business School**, London, UK.
- Mar 2007 *Designing for Dyslexics: Challenges and Opportunities*. Invited lecture at the Inclusive Design module, **City University London**, Human-Centered Systems MSc Program. London, UK.

ACADEMIC SERVICE AND ACTIVITIES

- 2012 - Present **Scientific Review Committee (SRC)** Member in the National Olympiad for Scientific Innovation (**Ibdaa** | الأولمبياد الوطني للإبداع) | King Abdulaziz Foundation (**Mawhiba**). *Reviewing; Training, Advising, and Mentoring* students for international competitions (**Intel ISEF, Intel Arabia**).
- 2017 - Present **Stanford's Women in Data Science (WiDS) Ambassador** for Saudi Arabia.
- 2020 – Present **Qimam Fellowship** Mentor for the 2020 Cohort of Fellows.
- 2020 – Present **Mentor** in the BigSib Mentoring Program of Project 1932.
- 2018 – 2019 **Co-Chair**, ACM's HCI Track in the Grace Hopper Conference (GHC), Houston, Texas, USA. – The largest technical conference for Women in Computing with **20,000 participants** in 2018.
- 2015 **Co-Chair**, Technical Program for URC 2015, Zayed University's Annual Conference on Undergraduate Research on Applied Computing, Dubai, United Arab Emirates.
- 2012–2014 **Program Board Member**: Online Communities and Social Computing in the 15th Human-Computer Interaction (HCI) International Conference; USA, July 2013.
- 2012–2014 **Mentor** in KSU's Mentoring Program in KSU's Office of Education and Academic Affairs.
- 2012–2013 **Steering Committee Member**, Second International Conference on Electronics, Communication, and Photonics (**SIEPC 2013**) | KACST, Riyadh, Saudi Arabia; Apr 27-30, 2013.
- 2010- 2015 **Coordinator**: Software and Knowledge Engineering Research Group | SKERG.ksu.edu.sa
- 2010 – Present **Director**, Human-Computer Interaction (HCI) Lab | HCLab.info
- 2011–2014 **Technical Program Committee Member**, International Multi-Conference on Computing in the Global Information Technology; Committees in ICCGI 2011 | ICCGI 2012 | ICCGI 2013.
- 2011–2014 **Technical Program Committee Member**, Zayed University's Annual Conference on Undergraduate Research on Applied Computing, Dubai, UAE; in URC2011 | URC2012 | URC2013 | URC2014
- 2012–2013 **Reviewer**: ACM's CHI2013; Paris, France | KACST's SIEPC 2013; Riyadh, KSA | KSU's 4th Annual Student Scientific Symposium | Computers in Human Behaviour Journal.
- 2013 **Coordinator**, *IBM Initiative for Women in Research* | Pilot Program of the IBM Academic Initiative for Women in Computing in Saudi Arabia; launched in KSU, March 2013.
- 2006-2008 **PhD Student Representative**, Research Committee. *School of Informatics, City Univ. London, UK.*
- 2003-2004 **Faculty Advisor**, Information Technology in Education (ITeD) Student Association. *Prince Sultan University, College of Computer and Information Sciences.*

PERSONAL PROFILE

Nationality	Saudi Arabia
Place of Birth	Riyadh, Saudi Arabia
Affiliation	<i>Professional</i> IEEE <u>Women in Engineering (WIE)</u> Board Member, <u>Arab Women in Computing (ArabWiC)</u> ; President of the Saudi Arabian Chapter for the Arab Women in Computing <u>ArabWiC</u> 2012-2019 and Board member 2020-present), <u>WITI Associate</u> (Women in Technology International), Usability Professionals Association (UPA), Association of Advancement of Computing in Education (AACE), ACM <u>Women in Computing (ACM-W)</u> .