

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 *Research Scholar and Ibn Khaldun Postdoctoral Fellow*, Ideation Lab ([Ideation](#))
School of Engineering, Massachusetts Institute of Technology, MIT, Cambridge, USA

2014 –2015 *Vice-Dean of Academic Affairs*, Prince Sultan University's College for Women ([PSU](#))
Assistant Professor, Software Engineering MSc Program, College of Computer Science
Prince Sultan University, Riyadh Saudi Arabia (*One-Year Secondment from KSU*)

2012 –2014 *Vice-Chair*, Department of Software Engineering ([SE](#))
College of Computer and Information Sciences
King Saud University, Riyadh, Saudi Arabia

2012 - 2013 *Honorary Research Fellow*, School of Engineering and Digital Arts ([EDA](#))
University of Kent, Canterbury, England, United Kingdom

2011 – 2012 *Acting Vice-Chair*, Department of Software Engineering ([SE](#))
College of Computer and Information Sciences
King Saud University, Riyadh, Saudi Arabia

2010 – 2015 *Assistant Professor*, 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 *Teaching Assistant*, School of Informatics, MSc in Human-Centered Systems Program ([HCID](#))
Center for HCI Design, City University of London, England, U.K.

2002 – 2004 *Lecturer*, College of Computer and Information Sciences ([CCIS](#))
Prince Sultan University, Riyadh, Saudi Arabia

2000 – 2002 *Research Associate*, 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 مستقبل 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. (الزملة 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-Musaed (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 Abdualziz Foundation for Giftedness and Creativity (**Mawhiba**). PI: Dr. Hend Al-Khalifa. Time period: Jan 2009 - Apr 2009.

PUBLICATION PROFILE



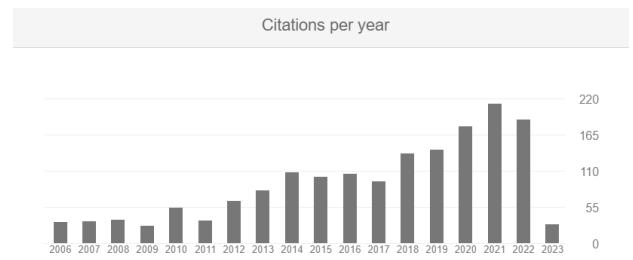
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DBLP.UNI-TRIER.DE/ALWABIL



Google
Scholar
H-index 19
i10-index 36



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]

Mashael 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 Alshawi, **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 Piriyawat, 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 Alshawi, 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 HCII2014, 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 HCII2014, Advanced Interaction Modalities and Techniques, Lecture Notes in Computer Science Volume 8511, 2014, pp 362-369.

Sharifa Alghowinem, Sarah Alghowinem, 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 HCII2014, Advanced Interaction Modalities and Techniques, Lecture Notes in Computer Science Volume 8511, 2014, pp 717-728.

Salma Aldawood, Faisal Aleissa, Riyadh Alnasser, Anas Alfaris, **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 HCII2014, 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 HCII2014; 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 Almuhamma, 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 HCII2013, 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-Musaad, 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 Alhumaimeedi, 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 (HCII2011), Orlando, Florida, July 9-14, 2011. Communications in Computer and Information Science (CCIS) series, pp. 260-264, Springer, Heidelberg (2011) | [DOI](#)

Hala Almuhamna, 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 (HCII2011), 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-Mussaed, 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 لمجتمع) 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**) | 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 (SIECPC 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 | HCIIlab.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 SIECPC 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 *Professional* IEEE Women in Engineering (WIE) Board Member, Arab Women in Computing (ArabWiC); **President** of the Saudi Arabian Chapter for the Arab Women in Computing ArabWiC 2012-2019 and Board member 2020-present), WITI Associate (Women in Technology International), Usability Professionals Association (**UPA**), Association of Advancement of Computing in Education (**AACE**), ACM Women in Computing (ACM-W).