Dr. Abeer S. Al-Humaimeedy

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Current Roles

- Vice head of the Software Engineering Department, College of Computer and Information Sciences (CCIS), King Saud University (KSU).
- Assistant professor at the Software Engineering Department, College of Computer and Information Sciences (CCIS), King Saud University (KSU).
- Assistant vice dean for Quality and Development, College of Computer and Information Sciences (CCIS), King Saud University (KSU).
- A member of the board of directors, Research Center of the Female Science and Medical colleges, King Saud University
- Principle investigator at Software and Knowledge Engineering Research Group (SKERG), KSU
- Visting researcher at Software Modelling and Applied Logic (SMAL) group, King's College London, UK
- Founding member and board member of Tawasul organization for Assistive Technologies for People with Disabilities.

Education

- **[2016]** *PhD in Computer Science*, Informatics department, School of Natural & Mathematical Sciences, King's College London, UK.
    - Thesis title: Specification and Analysis of Service Oriented Architectures within the Calculus of Communicating Sequential Processes (CSP)
- **[2010]** *Diploma in English for Academic Purposes* (EAP), Language centre, University College of London (UCL)
- **[2009]** *Certified trainer for distributing the dialogue culture* from King Abdul Aziz Dialogue Center
- **[2004]** *MSc in Computer Science*, College of Computer and Information Sciences, King Saud University, Riyadh.
    - Dissertation title: Automatic Face Detection for Count Estimates
- **[2000]** *BSc in Computer Applications*, College of Computer and Information Sciences, King Saud University, Riyadh.
    - Graduation dissertation title: An Educational Multimedia Application for the PC System

Achievements

Awards:

- **[2011-2015]** *5 distinction awards* from the Saudi cultural bureau - Saudi embassy at the United Kingdom for my annual outcomes during the PhD.
- **[2004]** *Second class honor* for my M.Sc distration.
- **[2004]** One of the four students in Computer Science nominated to the *Prize of Scientific Distinction on behalf of the wife of the Custodian of the Holy Mosque Princess Al-Joharah Al-Braheem*
- **[2000]** *First class honor* for my B.S graduation distration.
- **[1996]** *Ranked the first* in high School, Alabnaa Secondary School.

Memberships:

- Institute of Electrical and Electronics Engineers (IEEE).
- Association for Computing Machinery (ACM), SIGHCI.
- SKERG research group, HCI laboratory, KSU.
- SMAL group, King's College London, UK.
- ArabWiC (Women in Computing).
- CIAG Cyber Security group.
- Tawasul organization for Assistive Technologies for People with Disabilities.

Training (selected)

Non-technical:

- **[2018]** *Developing academic leaders course– Vice heads of academic departments,* Deanship of Skills Development, KSU.
- **[2017]** *Introductory course in the New Performance Management Regulation – Academic leaders.* Deanship of Skills Development, KSU.
- **[2017]** *The foundation course for new faculty members.* Deanship of Skills Development, KSU.
- **[2016]** *Women Leadership Forum in Higher Education*, ALC, Saudi Higher Education Ministry, HolidayInn Hotel, Riyadh.
- **[2014]** *How to Construct An Argument; Mindmapping*, King's College London, UK.
- **[2013-2014]** *Springboard Women's Development Programme*, King's College London, UK
- **[2013]** *Introduction to Academic Leadership*, ALC, Saudi Higher Education Ministry, Manchester, UK
- **[2013]** *Speakeasy Public Speaking for Research Students and Research Staff*, King's College London, UK
- **[2012]** *Neruro-Linguistic Programming NLP for Researchers*, King's College London, UK
- **[2009]** *Training trainers for distributing the dialogue culture*, King AbdulAziz Dialogue Center, Riyadh.

Technical:

- **[2017]** Business Process Analyst, IBM, Alfaisal University, Riyadh
- **[2012]** *Advanced Concurrency/ Model Checking (MCH)*, Oxford University, Oxford, UK
- **[2011]** *Concurrency and Distributed Systems (CDS)*, Oxford University, Oxford, UK
- **[2011]** *Coq Theorem prover*, King's College London, UK.
- **[2009]** *Network & Host Security course*, Information Security Consultant I(TS)2, Riyadh, KSA
- **[2008]** *Courses in ICDN1 and ICDN2 for CCNA Cisco certification*, Global Knowledge, Riyadh, KSA

Languages

- Arabic (Mother langauge)
- English (Profissional level)

Employment

- **[2018 – Present]** *Assistant professor* at King Saud University at the College of Computer and Information Sciences, Software Engneering Department.
  - o Teaching: (MSc) Advanced Software Architecture (BSc) Introdcution to Software Engineering.
- **[2016 – 2018]** *Assistant professor* at King Saud University at the College of Computer and Information Sciences, Information Technology Department.
  - o Teaching: (BSc) Distributed systems and Software engineering II.
- **[2006 – 2016]** *Lecturer* at King Saud University at the College of Computer and Information Sciences, Computer Applications Department and then Information Technology Department.
  - o Teaching: (BSc) Introduction to computer, Introduction to visual Basic, C Programming, Operating Systems, Computer Architecture, Network Administration and Software Engineering.
- **[2000 – 2006]** *Sub-contractor* and then *Teacher assistant* at King Saud University at the College of Computer and Information Sciences, Computer Applications Department.
  - o Teaching: (BSc labs and tutorials) Pascal, C Programming, C++ Programming, Assembly Language, Network, Computer Environment, Concepts of Programming Language, Operating Systems and Computer Architecture.

Professional Experience

- **[2018 - Present]** *Vice head of the Software Engineering Department,* CCIS, KSU.

- **[2018 - Present]** *A member of the board of directors,* Research Center of the Female Science and Medical colleges, KSU.
- **[2017]** *A member of the preparation team for Excellence in Development and Quality Award,* Deanship for Quality and Development, KSU.
- **[2016 - Present]** *Assistant vice dean for Quality and Development*, CCIS, KSU.
- **[2016 - 2017]** *Head of the Community Services committee*, CCIS, KSU.
- **[2016]** *Head of the Public Relationships committee*, IT department, CCIS, KSU.
- **[2016]** *Female coordinator for Women Leadership Forum in Higher Education,* ACL, Ministry of education, Riyadh.
- **[2012-2015]** *The representative for PhD students at the Informatics department*, King's College London, UK.
- **[2010]** *Student representative of class 7*, Language centre, University College of London (UCL)
- **[2009 – 2010]** *Head of the Community Service Committee*, IT department, CCIS, KSU
- **[2010]** *Organiser of Cisco day event*, CCIS, KSU.
- **[2010]** *The female organiser of lunching Microsoft Imagine cup event*, CCIS, KSU.
- **[2008 – 2009]** *Member of the Communication with Private-Sectors Committee*, IT department, CCIS, KSU.
- **[2008 – 2010]** *The IT department – Cisco Coordinator*, CCIS, KSU.
- **[2008 – 2010]** *Supervisor of the Digital Minds Club and its branch Student Tech club (Microsoft.NET club)*, IT department, CCIS, KSU.
- **[2007 – 2008]** *Member of the Makeup Exam committee*, IT department, CCIS, KSU.
  [2007] *Member of Nominating the Student Leader committee*, IT department CCIS, KSU
- **[2006]** *Leader of students' activities*, IT department, CCIS, KSU.
- **[2003]** *Leader of students' activities*, Computer Applications department, CCIS, KSU.
- **[2004, 2009]** *Member of Nominating the Ideal Student committee*, IT department, CCIS, KSU
- **[1997 – 1998]** *A student member of the Media and Information Committee,* Female Students Graduate Celebration, KSU.
- **[1998]** *A student organizer of the art section of the Jenadriyah National Festival*, Riyadh
- **[1997 – 1999]** *The reporter of Risalat Al-Jameah Newspaper*, KSU.

Community Services

- **[2018]** A *mentor and a judge at Hajj Hackathon*, The Saudi Federation for Cyber Security, Programming, and Drones.
- **[2017]** *Team member*, KSU volunteers team at slums and urban development project, Bunyan Charity.
- **[2016]** *Conducting a training session on effective conversation skills*, Deanship of Library Affairs, KSU.

- **[2016]** *Conducting a training session on Designing and Presenting Scientific Posters*, Community services committee, KSU.
- **[2016]** *Organising a campaign on #Denote_your_Knowledge,* Community services committee, CCIS, KSU.
- **[2016]** *Organising a campaign on #CCIS_serve_the_community,* Community services committee, CCIS, KSU.
- **[2015]** *Conducting a training session on Decision-Making and Time Management*, Saudi Society, King's College London, UK
- **[2014]** *Conducting a training session on Decision-Making and Time Management*, Universities fair, London, UK
- **[2013]** *Conducting a workshop on How Do Computers Work? for Grade 2 students*, King Fahad Academy, London, UK
- **[2011]** *Organising a Saudi Cultural Day for KG2 students*, King Fahad Academy, London, UK
- **[2009]** *Conducting a workshop on How to protect your computer*, Princess Norah Bint Abullrahman University, Riyadh.
- **[2009]** *Conducting a workshop on The Development of Communication Skills in the Dialogue*, KSU.
- **[2009]** *Organising an MS office course,* Robwa Orphanage Centre, Riyadh.

Research Interests and Experience:

My latest research covers the following Topics:

- Service oriented computing (SOC) Systems modelling and verification.
- Formalising security policies using process calculi, in particular communicating Sequential Processes (CSP).
- Gamification for kids patient journey.
- Virtual museum for alqet heritage.
- So'rah: An Arabic Mobile Health Application for Saudi Dietary Evaluation.

Research Activities

Paper Reviewing:

- **[2016]** The 19th International Conference on Foundations of Software Science and Computation Structures *(FoSSaCS 2016)*, External reviewer.
- **[2015]** The 18th International Conference on Foundations of Software Science and Computation Structures *(FoSSaCS 2015)*, External reviewer.
- **[2014]** The 41st International Colloquium on Automata, Languages, and Programming *(ICALP 2014)*, External reviewer.
- **[2014]** Joint meeting of the 23rd EACSL Annual Conference on Computer Science Logic, and the 29th Annual ACM/IEEE Symposium on Logic in Computer Science *(CSL-LICS 2014)*, External reviewer.

- **[2013]** The ACM/IEEE 16th International Conference on Model Driven Engineering Languages and Systems *(MODELS 2013)*, External reviewer.
- **[2012]** The Imperial College Computing Student Workshop *(ICCSW 2012)*, PC member.
- **[2012]** The 5th International Conference on Software Language Engineering *(SLE 2012)*, External reviewer The 37th International Symposium on Mathematical Foundations of Computer Science *(MFCS 2012)*, External reviewer.
- **[2011]** The 7th European Conference on Modelling Foundations and Applications *(ECMFA 2011)*, External reviewer.
- **[2011]** The 14th International ACM SIGSOFT Symposium on Component Based Software Engineering *(CBSE-2011)*, External reviewer.

Seminars, Talks, and Workshops (selected):

- **[2018]** *So'rah: An Arabic Mobile Health Application for Saudi Dietary Evaluation.* In 10th eTELEMED, The Tenth International Conference on eHealth, Telemedicine, and Social Medicine, Rome, Italy, March 25-29, 2018.
- **[2016, 2018]** *Designing and Presenting Scientific Posters*, Deanship of Scientific Research, KSU
- **[2016]** A *Formal Methods Approach to the Specification and Analysis of Service Oriented Architectures,* SKERG, UK.
- **[2015]** *Hints for Academic Writing,* Invited speaker, Coffee Meeting, London, UK.
- **[2015]** *Specification and Analysis of Service Oriented Architectures within the calculus of communicating sequential processes (CSP),* SMAL seminar, King's College London, UK
- **[2015]** *Modelling Asynchronous communications within the Process Calculus of Communicating Sequential Processes (CSP)*, 8th SSC, Imperial College, London, UK.
- **[2014]** *Introducing Mobility into CSP*, Mobility Reading Group (MRG), Imperial College, UK.
- **[2014]** *Introducing Mobility into CSP*, NWPT 2014, Halmstad University, Sweden.
- **[2014]** *Enhance the Specification and Verification Techniques for Multiparty Sessions in SOC,* SMAL seminar, King's College London, UK
- **[2014]** *Enabling Synchronous and Asynchronous Communications in CSP for SOC*, LSFA 2014, Brasília D.F., Brazil.
- **[2014]** *Modelling Dynamic Compensations within the Process Calculus of Communicating Sequential Processes (CSP)*, 7th SSC, Edinburgh, UK.
- **[2014, 2015]** *CSP Practical Tools*, 7CCSMCOM - Computational Models, King's College London, UK.
- **[2013]** *Enhancing the Specification and the Verification Techniques of Multiparty Sessions in SOC*, SMAL event day, King's College London, UK.
- **[2013]** *Achieve pi-calculus Style Mobility into CSP*, The 29th British Colloquium for Theoretical Computer Science (BCTCS 2013), Bath, UK.
- **[2012]** *Mobile Compensating CSP*, SMAL Meeting, King's College London, UK.
- **[2012]** *Survey on the Service-Oriented Architecture Process Calculi*, 6th SSC, Uxbridge, UK.

- **[2012]** *Specification and Analysis of Service Oriented Architectures within Higher Order Constructive Type Theory*, SMAL event days, King's College London, UK.
- **[2012]** *General Dynamic Recovery for Compensating CSP*, DCM 2012, Cambridge, UK.
- **[2012]** *Specification and Analysis of Service Oriented Architectures within Higher Order Constructive Type Theory*, Plab Meeting for KIT visitors, King's College London, UK.

Posters:

- **[2014, 2015]** *Specification and Analysis of Service Oriented Architectures (SOA) within Higher Order ConstructiveType Theory*, Ada Lovelace Day, Celebrating Women in Science, KCL, London, UK.
- **[2014]** *Specification and Analysis of Service Oriented Architectures (SOA) within Higher Order ConstructiveType Theory,* 7th SSC, Edinburgh, UK.
- **[2014]** *Specification and Analysis of Service Oriented Architectures (SOA) within Higher Order ConstructiveType Theory*, Research Day of the School of Natural & Mathematical Science, KCL, London, UK.
- **[2013]** *Specification and Analysis of Service Oriented Architectures (SOA) within Higher Order ConstructiveType Theory*, PhD Posters Exhibition, KCL, London, UK
- **[2010]** *Service-Oriented Architectures (SOA)*, EAP Posters Exhibition, UCL, London, UK.

Publications

- **[2018]** Abeer S. Al-Humaimeedy, Rahaf Almozaini, Lama Almansour, Kholoud Alaqeely, Ahlam Almutairi, and Abeer Alolayan. So'rah: An Arabic Mobile Health Application for Saudi Dietary Evaluation. In Proceedings of the 10th eTELEMED, The Tenth International Conference on eHealth, Telemedicine, and Social Medicine, Rome, Italy, March 25-29, 2018, pages 131 - 136. Thinkmind, IARIA.
- **[2015]** A. S. Al-Humaimeedy and M. Fernandez. Enhancing the Specification and Verification Techniques of Multiparty Sessions in SOC. In M. Falaschi and E. Albert, editors, Proceedings of the 17th International Symposium on Principles and Practice of Declarative Programming, Siena, Italy, July 14-16, 2015, pages 19-30. ACM, 2015.
- **[2015]** A. S. Al-Humaimeedy and M. Fernandez. *Enabling Synchronous and Asynchronous Communications in CSP for SOC*. Electr. Notes Theor. Comput. Sci., 312:69-88, 2015.
- **[2015]** A. S. Al-Humaimeedy. *Modelling Asynchronous Communication within the Process Calculus of Communicating Sequential Processes (CSP)*. In the 8th Saudi Student Conference (8th SSC), Imperial College, London, UK, 2015.
- **[2014]** A. S. Al-Humaimeedy and M. Fernandez. *Introducing Mobility into CSP*. In The 26th Nordic Workshop on Programming Theory (NWPT 2014), Halmstad

University, Sweden, extended abstract (full version accepted in JLAMP), 2014.

- **[2014]** A. S. Al-Humaimeedy. *Modelling Dynamic Compensations within the Process Calculus of Communicating Sequential Processes (CSP)*. In the 7th Saudi Student Conference (7th SSC), The University of Edinburgh, Edinburgh, UK, 2014.

- **[2014]** A. S. Al-Humaimeedy and M. Fernandez. *General Dynamic Recovery for Compensating CSP*. In B. Lowe and G. Winskel, editors, DCM, volume 143 of EPTCS, pages 3-16, 2014.

- **[2012]** A. S. Al-Humaimeedy. *Survey on the Service-Oriented Architecture Process Calculi*. In the 6th Saudi Student Conference (6th SSC), Brunel University, Uxbridge, UK, 2012.

- **[2010]** Latifa Al-Abdulkarim, Areej Al-Wabil, Maha M. Al-Yahya, Abeer Al-Humaimeedy, and Sara Al-Khudair. *Methodological Considerations for Involving SpLD Practitioners and Specialists in Designing Interactive Learning Systems*. In ICCHP (2): pages 1-4, 2010.

- **[2009]** Mona F.M. Mursi, Ghazy M.R. Assassa, Abeer Al-Humaimeedy, and Khaled Alghathbar. *Face Detection and Count Estimates in Surveillance Color Images*. Egyptian Computer Society Journal (ECSJ), 31, Number 2, 2009.

- **[2009]** Mona F.M. Mursi, Ghazy M.R. Assassa, Abeer Al-Humaimeedy, and Khaled Alghathbar. *Automatic Human Face Counting in Digital Color Images*. In the 8th WSEAS International Conference on Signal Processing, Robotics and Automation, Cambridge, UK, 2009.