Curriculum Vitae

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Last update Dec 1, 2015

Education:

- B. Sc. In Electrical & Electronics Engineering-Computer Engineering, Aleppo University 1998.
- Diploma in the Automation & Industrial Electronics, Aleppo University 2000 (thesis on neural networks).
- Diploma in Computer Engineering, Aleppo University 2005 (thesis on expert systems).

Technical Skills:

Programming Languages:	R-Language, PHP, Perl, JavaScript, Visual Basic, VBA, and Prolog.
Database Systems:	MySQL, Microsoft Access, SQLite.
Tools and Programs:	GenStat, SPSS, Adobe Dreamweaver, Photoshop.
Internet Technologies:	HTML, CSS, Apache, CVS/SVN, Xdebug, PHPUnit, PHPDocumentor, CakePHP.
Operating Systems:	Windows (9x, W2K, XP, 7, and 8), Linux (Red Hat, Fedora, Suse, and Ubuntu).

Work Experience:

- International Center for Agricultural Research in the Dry Area www.icarda.cgiar.org (ICARDA), Aleppo, Syria, Specialist – Experimental Research Informatics, Aug 2002 - Present.

  I provide biometrics support for developing Genetic Resources, Crop and Genomic Information and Analysis Systems at ICARDA. I participate in database & web-based system development including several dynamic websites for international partners. I also explore some of cutting edge biometrical and statistical techniques like developing web-based data analysis tools using R and Shiny server, Neural Networks, Random Forests, Hidden Markov Models, and High Performance Computing.

  I participate in training ICARDA and NARS staff by deliver practical sessions in biometrics courses using GenStat and R statistical software as well as develop related training materials. Topics includes subjects like correlation & regression, ANOVA, and clustering. Courses delivered in more than dozen of countries attended by more than 1000 engineers. The list includes but not limited to ESCWA Lebanon 2003, SPII Iran 2004 & 2012, Eritrea 2005, GCSAR Syria 2005 & 2007, INRAA Algeria 2007, ARC Libya 2007 & 2010, IRESA Tunis 2008, Bahrain 2009, Uzbekistan 2009 & 2011, UAE 2011, IIPR India 2011, Turkey 2011, and ARC Egypt 2012.

- PHP and Arabic language project www.ar-php.org, founder and leader, Feb 2006 - Present.

  I develop an open source solutions and provides professional support helps small and medium size companies meet the complex challenge of developing professional Arabic websites in the PHP and MySQL environment by providing a set of tools that enable developers to serve professional search, present and process Arabic language contents.

- Ray Publishing and Science www.raypub.net, Aleppo, Syria, as a supervisor/editor in the web technologies section at their well-maintained forum, Aug 2003 – Jul 2006.

- Business Optimization Consultants (B.O.C) bocme.com, Aleppo, Syria, Website security specialist, Dec 2004 – Aug 2005.
  I was responsible to take care about their websites security issues as well as increase the efficiency of their developing environment (e.g. implement CVS, and set working procedures & standards).

- Maktoob maktoob.com, Amman, Jordan, Software Engineer/Programmer, Sep 2002 – Feb 2003.
  I developed CashU sub shopping system enable users to buy books from Amazon using CashU cards (cashucard.com) using socket technology, regular expressions, shopping cart system, and CashU server API. Development performed on LAMP (Perl) environment.

- Business Optimization Consultants (B.O.C) bocme.com, Aleppo, Syria, Senior Web Developer, Feb 2000 – Jul 2002.
  I worked as programming team leader effort to develop the first Arabic/English auction site on the web (i.e. MazadMaktoob.com, which currently become Souq.com) and Waseet newspaper web site (ewaseet.com). Development performed on LAMP (Perl) environment.

- Syriamica (syriamica.com), Aleppo, Syria, Software Engineer/Programmer May 1999 – Jan 2000.
  I developed time accounting management and payroll application integrated to barcode machine using Visual Basic 6.0, SQL-Server, ADO 2.1, and Crystal Reports 6.0.

- I delivered hands-on and advanced PHP courses in several training centers at Aleppo city includes ExecuTrain, Zoom, CPC, GSIBC, and Manarat. (in total more than 150 web developers since 2003).

Publications (see appendix I for more details):
- Book chapter co-author in both "Phenomics in Crop Plants: Trends, Options and Limitations" published by Springer and "Introduction to Sequence and Genome Analysis" published by iConcept.
- Co-Author in 3 scientific papers, one of them is the "Development of 1000 Microsatellite Markers across the Date Palm Genome" paper which wins the Khalifa International Date Palm Award as the best distinguished research and study in 2012: http://kidpa.ae/en/index.aspx?id=67
- Author of "PHP and Arabic Language" book published by Ray publishing in 2007, and participated in translate six technical books in PHP, Web, and JSP.
- Author of 21 articles published in the SCS Informatics magazine http://www.infomag.news.sy.

Open Source:
- Founder of the PHP and Arabic language project: http://www.ar-php.org
- Author of more than 20 PHP classes submitted to the PHP classes repository (i.e. phpclasses.org): http://kshamaa.users.phpclasses.org/blog/post/107-PHP-in-Arabic.html
- Founder of the Rama Content Management System (CMS): http://sf.net/projects/ramazaitencms

Courses and Certificates (see appendix II for more details):
- Earned five certificates in topics related to analysis using R language delivered by Johns Hopkins University on Coursera.org.
- Earned two certificates in topics related to bioinformatics using Perl language by Oxford University, continuing education department.
- Participated in two LinkSCEEM High Performance Computing (HPC) training workshops, Cyprus.
- Certified in Statistical Analysis of Microarray Data with R by the Institute for Statistics Education.
- Certified in Utilization of Expert Systems in Agriculture Research and Production by ICARDA.
- Earned Brainbench certificates in PHP, HTML, JavaScript, SQL, Apache, Server Administration, Web Design Concepts, E-Commerce Concepts, Software Quality Assurance and Dreamweaver MX.
- Trained in Red Hat Linux Essentials, Red Hat System Administration, and Oracle JDeveloper.

Invited Talks and Presentations:
- Lecturer, Biotechnology department, Technical Engineering faculty at Aleppo University, spring semesters 2009-2010. Responsible for Bioinformatics course development and assessment.
- PHP and Arabic Language Project presented at the First National Conference of the Arabic Digital Content Industry, Ebla Cham Palace Damascus, Syria Jun 13-15, 2009.
- Arabic Free Open Source Projects and managing them, Ar-PHP Project as an Example presented at the iCommunity FOSS-Workshop, Syrian Computer Society center, Damascus, Syria Feb 4, 2009.
- Introduction to some of Developer Tools in the Open Source Software Environment presented at the SCS Open Source Information Systems conference, Aleppo, Syria Nov 12-13, 2008.
- CVS training workshop delivered in the Syrian Computer Society, Aleppo, Syria Feb 28, 2008.
- PHP and Arabic Language Project presented at the Second Syrian Conference on Free/Libre Open Source Software, Aleppo, Syria Nov 21-22, 2007.
- Convert Desktop Applications to Web Applications presented at the Ninth Syrian Computer Society Symposium entitled Information Systems, Aleppo, Syria Nov 27-29, 2004.

Workshops and Conferences Attended:

- Expert Meeting to Establish the Arab Network of Free and Open Source Resources, ALECSO, Tunis Nov 23-24, 2011.
- International Crop Information System (ICIS) developers' workshop, ICRISAT campus, Hyderabad, India, Mar 28 – Apr 1, 2011.
- Generation Challenge Program (GCP) Molecular Breeding Platform (MBP) Informatics workshop, Marriot hotel, Hyderabad, India, Feb 17-24, 2010.
- Arab Techies Code Sprint, Cairo, Egypt May 20-23 2009.
- Utilization of Intelligent Systems for Plant Protection workshop, Aleppo, Syria Mar 6-7, 2006.
- Free and Open Source Software workshop, Damascus, Syria Mar 2-4 2005.
- On-Farm Water-Use Efficiency workshop, ESCWA, Beirut, Lebanon Oct 13-15 2003.
- Al-Sham Second International Conference on Informatics, Damascus, Syria Apr 26-29, 1999.

Honors and Awards:

- Our paper wins Khalifa International Date Palm Award as the best distinguished research and study in 2012: http://kidpa.ae/en/index.aspx?id=67
- Recognition of Outstanding Performance, ICARDA, 2008.
- Al-Basel Academic Excellence Certificate, Ministry of Higher Education, Syria, 1995.

Professional Memberships:

- Member of Syrian Computer Society (www.scs-net.org) since 1996.

Languages: Arabic (mother tongue) and English (good).

Visited Countries: Algeria, Bahrain, Cyprus, Egypt, Eritrea, India, Iran, Italy, Jordan, Kuwait, Lebanon, Libya, Qatar, Tunisia, Turkey, UAE and Uzbekistan.

Personal Data:	**Nationality:** Lebanese	**Date of Birth:** 2 Aug 1975
	Place of Birth: Kuwait	**Marital Status:** Married
	Driving License: Full and clean	**Interests:** F1, billiards and reading

I am working in international, multi-cultural, multi-ethnic environment with sensitivity and respect for diversity. References available on request.

Appendix I – Publications

Books:

- Al-Sham'aa, K. (2007). "PHP and Arabic Language" (in Arabic). Ray publishing, 185 pp. (http://www.raypub.com/catalog/book_info.php?products_id=678).
- Elite group of programmers (2007). "Articles and Studies in PHP" (in Arabic). Ray publishing, 352 pp. (http://www.raypub.com/catalog/book_info.php?products_id=704).
- Elite group of programmers (2007). "Articles and Studies in Web" (in Arabic). Ray publishing, 336 pp. (http://www.raypub.com/catalog/book_info.php?products_id=703).
- Al-Sham'aa, K. and O. Al-Abdoullah (2005). "JSP Programmer Book" (in Arabic). Ray publishing, 709 pp. (http://www.raypub.com/catalog/book_info.php?products_id=490).
- Elite group of programmers (2005). "Techniques and Solutions in PHP 2" (in Arabic). Ray publishing, 144 pp. (http://www.raypub.com/catalog/book_info.php?products_id=463).
- Elite group of programmers (2005). "Techniques and Solutions in Web 1" (in Arabic). Ray publishing, 144 pp. (http://www.raypub.com/catalog/book_info.php?products_id=459).
- Elite group of programmers (2004). "Techniques and Solutions in PHP 1" (in Arabic). Ray publishing, 144 pp. (http://www.raypub.com/catalog/book_info.php?products_id=416).

Book Chapters:

- Singh, M. and K. El-Shama'a (2015). Experimental Designs for Precision in Phenotyping. In Kumar, J.; Pratap, A. and A. Shiv Kumar (Eds.), Phenomics in Crop Plants: Trends, Options and Limitations (pp. 235-247). ISBN 978-81-322-2225-5. Springer New Delhi Heidelberg New York Dordrecht London.
- Jighly A, El-Shamaa K, Joukhadar R, Hamwieh A, Ogbonnaya FC (2014) Optimization of sequence alignment for microsatellite regions. In: Genomics III – Methods, Techniques and Applications (pp. 245-262). ISBN: 978-1-922227-416. iConcept Press.

Articles Published in Scientific Journals:

- Shomar, A.; Al-Hussein, N.; Al-Shamaa, K.; and B. Bayaa (2015). Effect of some Herbicides in Controlling Broomrapes (Orobanche spp.) and Major Weeds in Food Legumes (Chickpea, Lentil and Faba Bean). Arab Journal of Plant Protection 33(2): 164-176.
- Maalouf, F.; Khalil, S.; Ahmed, S.; Akintunde, A. N.; Kharrat, M.; El Shama'a, K.; Hajjar, S. and R. S. Malhotra (2011). Yield stability of faba bean lines under diverse broomrape prone production environments. Field Crops Research 124: 288–294.
- Hamwieh, A.; Farah, J.; Moussally, S.; Al-Sham'aa, K.; Almer, K.; Khierallah, H.; Udupa, S.; Lababidi, S.; Malek, J.A.; Aaouine, M. and M. Baum (2010). DEVELOPMENT OF 1000 MICROSATELLITE MARKERS ACROSS THE DATE PALM (PHOENIX DACTYLIFERA L.) GENOME. Acta Hort. (ISHS) 882:269-277. (http://www.actahort.org/books/882/882_29.htm).

Articles Published in non-Scientific Journals:

- Al-Shamaa, K. (2007). PHP and Arabic language (in Arabic). SCS Informatics 21: 56-59.
- Al-Shamaa, K. (2008). Statistics and Arabic language (in Arabic). SCS Informatics 25: 42-45.
- Al-Shamaa, K. (2008). CVS client tool (in Arabic). SCS Informatics 26: 30-33.
- Al-Shamaa, K. (2008). Setup and configure CVS server (in Arabic). SCS Informatics 28: 50-53.
- Al-Shamaa, K. (2008). Google Gears, last step for ideal web applications (in Arabic). SCS Informatics 29: 26-28.
- Al-Shamaa, K. (2008). AJAX technology in programmer point of view (in Arabic). SCS Informatics 33: 52-54.
- Al-Shamaa, K. (2009). Test and document PHP code (in Arabic). SCS Informatics 35: 10-13.
- Al-Shamaa, K. (2009). Firebug, tool for web developing (in Arabic). SCS Informatics 36: 58-60.
- Al-Shamaa, K. (2010). HTML 5, the next revolution in web (in Arabic). SCS Informatics 51: 58-61.
- Al-Shamaa, K. (2010). Scalable vector graphics SVG (in Arabic). SCS Informatics 54: 46-49.
- Al-Shamaa, K. (2010). JSON format to present objects in JavaScript (in Arabic). SCS Informatics 55: 44-47.
- Al-Shamaa, K. (2010). Firefox browser and web developers (in Arabic). SCS Informatics 56: 38-41.
- Al-Shamaa, K. (2010). Deeply understanding for GPL license (in Arabic). SCS Informatics 57: 42-45.
- Al-Shamaa, K. (2011). Learning XPath by examples (in Arabic). SCS Informatics 59: 36-38.
- Al-Shamaa, K. (2011). Forget about old JavaScript habits (in Arabic). SCS Informatics 65: 50-52.
- Al-Shamaa, K. (2011). Encryption and secure communication techniques (in Arabic). SCS Informatics 70: 44-47.
- Al-Shamaa, K. (2012). Practical tour in the VM world (in Arabic). SCS Informatics 71: 44-47.
- Al-Shamaa, K. (2012). R language and statistical analysis, introduction (in Arabic). SCS Informatics 75: 36-39.
- Al-Shamaa, K. (2012). R language and statistical analysis, statistical graphs (in Arabic). SCS Informatics 77: 12-15.
- Al-Shamaa, K. (2012). R language and statistical analysis, statistical tests (in Arabic). SCS Informatics 78-79: 58-61.
- Al-Shamaa, K. (2012). R language and statistical analysis, advanced applications (in Arabic). SCS Informatics 80: 52-55.

Appendix II – Training Courses and Certificates

- Practical Machine Learning by Johns Hopkins University on Coursera. Certificate earned on Mar 2, 2015. https://www.coursera.org/account/accomplishments/records/yABsHFFZhDh6L4RX
- Reproducible Research by Johns Hopkins University on Coursera. Certificate earned on Dec 1, 2014. https://www.coursera.org/account/accomplishments/records/bzxcBPGKbSCMgucm
- Developing Data Products by Johns Hopkins University on Coursera. Certificate earned on Sep 29, 2014. https://www.coursera.org/account/accomplishments/records/76JU5BgZsxCbFtCX
- R Programming by Johns Hopkins University on Coursera. Certificate earned on Aug 4, 2014. https://www.coursera.org/account/accomplishments/records/tvnXJLhxXzC8kq3w
- Data Analysis by Johns Hopkins University on Coursera. Certificate earned on Mar 22, 2013. https://www.coursera.org/course/dataanalysis
- Statistical Analysis of Microarray Data with R by the Institute for Statistics Education. Certificate and credit 5.0 CEU's earned on Nov 23, 2011. http://www.statistics.com/microarray
- PRACE/LinkSCEEM, High Performance Computing winter school held in Nicosia, Cyprus Jan 24-27, 2011. http://linksceem.eu/joomla/index.php?view=article&id=112
- International LinkSCEEM High Performance Computing conference held in Paphos, Cyprus Oct 6-8, 2009. http://www.linksceem.eu/joomla/index.php?view=category&id=40&layout=blog
- Statistics for Biosciences by University of Oxford's, continuing education department. Certificate and 15 CATS points earned on Mar 2, 2009.
- Perl Programming for Bioinformatics by University of Oxford's, continuing education department. Certificate and 15 CATS points earned on Nov 10, 2006.
- IPGRI ICT-KM training on Information Interoperability held in Rome, Italy Jun 13-17, 2005.
- Apache 2.0 Administration by Barinbench. Certificate earned on Jul 31, 2007.
- Server Administration by Barinbench. Certificate earned on Jul 21, 2007.
- Software Quality Assurance by Barinbench. Certificate earned on Jul 10, 2007.
- Dreamweaver MX 2004 by Barinbench. Certificate earned on Aug 28, 2006.
- PHP 4 by Barinbench. Certificate earned on May 31, 2006.
- SQL (ANSI) Fundamentals by Barinbench. Certificate earned on Apr 6, 2005.
- E-Commerce Concepts by Barinbench. Certificate earned on Apr 5, 2005.
- Web Design Concepts by Barinbench. Certificate earned on Apr 5, 2005.
- JavaScript by Barinbench. Certificate earned on Apr 5, 2005.
- HTML 4.0 by Barinbench. Certificate earned on Apr 5, 2005.
- Red Hat Linux Essentials (RH-033) and System Administration (RH-133), ICARDA in-house training course Aug 30 – Sep 4, 2008.
- Utilization of Expert Systems in Agriculture Research and Production by ICARDA. Certificate earned on Oct 14, 2004.
- Oracle JDeveloper by ITCC (Oracle authorized education partner), Amman, Jordan. Apr 4-8, 2004.
- English courses, levels 2C and 3B, the British Council, Teaching Centre, Syria. Completed in 2003.