

Fatmah Yousef Assiri

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EDUCATION

Ph.D. in Computer Science: Software Engineering Colorado State University, Fort Collins, Colorado, USA	2009 - 2015
M.S. in Computer Science: Database and Security Colorado State University, Fort Collins, Colorado, USA	2006 - 2008
B.A. in Computer Science and Statistics King Abdulaziz University, Jeddah, Kingdom of Saudi Arabia, KSA	2000 - 2004

PROFESSIONAL CERTIFICATES

Completion of Project Management Professional (PMP) Course PMTraning authorized by Project Management Institute (PMI), USA	Dec 2021
Completion of Data Science Course General Assembly, London	Nov 2020
Completion of the Effective Motivational Leadership Leadership Management International, USA	Aug 2018
Diploma of Professional Development in Teaching and Learning Center of teaching and learning development, KSA	May 2018
Completion of the Effective Personal Leadership Management International Leadership Management International, USA	Jan 2018
Completion of the Effective Personal Productivity Leadership Management International, USA	Aug 2017
Completion of the Advance Learning Course in the Application of the NCAAA National Qualification Framework to Teaching, Learning, and Assessments Center of the integration of research, teaching, and learning, Ireland	Mar 2017
Completion of a Continuing Professional Development Program in Designing, Writing, and Assessing Effective Course Learning outcomes Center of the integration of research, teaching, and learning, Ireland	Nov 2016
Excelling as Manager or Supervisor Skills path, USA	Feb 2015

TECHNICAL SKILLS

- Python (advanced), OCaml (beginner), VB. Net (advanced).
- Object Oriented Programing: Java (intermediate).
- Web Programming: HTML (advanced), PHP (beginner), Word press (Intermediate).
- Database application: MS. Access (advanced), SQL (advanced), Oracle (advanced), MySQL (advanced)
- Statistical Analysis: SASS (Intermediate) and S-Plus (Intermediate).
- Operating Systems: Linux (advanced), Microsoft (advanced), IOS (advanced)
- Research Tools: MuJava (Java mutation tool), Randoop (Test generation tool), Proteum (C mutation tool), and GenProg (Automated program repair tool).
- Version Controls: GitHub, and TortoiseSVN.

PROFESSIONAL EXPERIENCE

Consultant at the Innovation and Entrepreneurship Center University of Jeddah	Feb 2022- Present
Senior Project Coordinator in the Department of Software Engineering College of Computer Science and Engineering, University of Jeddah	Aug 2021- Mar 2022
Supervisor of Computer Science and Artificial Intelligence Department College of Computer Science and Engineering, University of Jeddah	Dec 2018- Jul 2021
Supervisor of Computer Science Department Faculty of Computing and Information Technology, University of Jeddah	July 2018- Dec 2018
Supervisor of Computer Science Department Faculty of Computing and Information Technology, King Abdulaziz University	Dec 2017- June 2018
Head of the Development and Quality Faculty of Computing and Information Technology, King Abdulaziz University	May 2016 - Dec 2017
Teaching Assistant in the Department of Computer Science Colorado State University	Jan 2015 - May 2015
Software Developer in the Natural Resource Ecology Laboratory Team member of the development team of the Agriculture Land Use National Greenhouse Gas Inventory Software (ALU), which is a national project that estimates the national greenhouse gas emissions regarding the different activates in land use. My roles involved designing and developing the database, writing complex SQL quires, designing and implementing the software using VB.Net., and creating a thorough testing plan to validate the software functionalities before releasing, Colorado State University.	Oct 2011 - Dec 2014

PROFESSHIONAL MEMEBERSHIP

- Professional Member, ACM
- Professional Member, IEEE
- Member of the "Future University" Committee, University of Jeddah
- Member of the academic accreditation board, King Abulaziz University
- Member of the ACM-W Student Chapter, Colorado State University

TEACHING COURSES

- Introduction to Database
- Software Testing and Validation
- Software Design Patterns
- IT Governance
- Business Continuity and Disaster Recovery

AWARDS

- Scientific Excellence Awards, University of Jeddah
- Innovative excellence award, King Abdulaziz University
- Invention award from Taiwan Association of Inventors, International Trade Fair Ideas Inventions New Products (iENA)
- Best Poster award , Rocky Mountain Celebration of Women In Computing

ACTIVITIES

- Translator of Introduction to Software Testing book from English to Arabic
- Attendance of the 2nd International Workshop on Next Generation of Intelligent Systems, College of Computer Science and Engineering, UJ
- Participant of the Online Hackathon Forums for Safe Cyber-Satellites, The General Administration of Education in Jeddah.
- Owner of Computer Assistant initiative, College of Computer Science and Engineering, UJ
- Consultant for one of the Ministry of Hajj initiatives to study, establish, and operate the monitoring and controlling center for all fields work, Design and Geographical Information System Company (CAD & GIS).
- Attendance of AI Everything Conference, Dubai
- Participation of Misk Values competition, Saudi Arabia
- Completion of the UN summer academy, Germany
- Evaluator member of Scientific Forum, King Abdulaziz University
- Evaluator member of Invention Competition, King Abdulaziz University
- Evaluator member at Multaqa Makka Althagafe, Makkah Province Emirate
- Reviewer for many scientific Journals and conference
- Leader for the Phone Application Group, King Abdulaziz University
- Session Chair, Smart Societies Infrastructure, Technologies, and Application Conference, Super Computing Centre
- Organizer Committee, Smart Societies Infrastructure, Technologies, and Application Conference, Super Computing Centre
- Volunteered in Alnabta festival, Jeddah
- Volunteered in Aytamona festival 13, Jeddah
- Served as sessions chair/co-chair, the Soft Computing and Software Engineering ScSe'15, Berkeley, United States
- Volunteered, Rocky Mountain Celebration of Women in Computing, Wyoming, United States
- Supervised an online Saudi Club, Colorado, United States
- Participated in Saudi Arabia cultural presentation by CSU International Office, Colorado State University

INVITED SPEAKER

- *Digital Creativity and the Improvement of Digital Skills*, Jeddah Awards Hachathon & Ideathon, 2022
- *Technology innovation to improve life quality*, Deanship of Community Service and Continuous Education, 2021
- *Data Science, Artificial Intelligence, and 2030 Vision*, Mecca Club Literary and Cultural and Deanship of Community Service and Continuous Education, 2021
- *My Experience in Translating Scientific Book*, Research and Innovation Week, College of Computer Science and Engineering, 2021
- *Software Fault Prediction Seminar*, Research and Innovation Week, College of Computer Science and Engineering, 2021
- *Fourth Industrial Revolution: future challenges*, Jeddah Changers, 2019
- *Digital Transformation is a step toward smart life*, Business and Management Forum, 2019

INTERESTS

Software Validation and Testing
Smart Solutions Development
Data analytics and Machine learning
Automation

LIST OF PUBLICATION

1. M. Alrehaili and **F. Assiri**, "Development of Ensemble Machine Learning Model to Improve COVID-19 Outbreak Forecasting," *Jordanian Journal of Computers and Information Technology*, Accepted for publication, 2022
2. H. Himdi, G. Weir, **F. Assiri**, and H Al-barhamtoshy, "Arabic Fake News Detection based on Textual Analysis," in *Arabian Journal of Science and Engineering*, November 2021.
3. B. Alharbi, **F. Y. Assiri**, and B. M. Alharbi, "A Comparative Study of Student Performance Prediction using Pre-Course Data," in *Advances in Distributed Computing and Artificial Intelligence Journal (ADCAIJ)*, 2021.
4. **F. Y. Assiri**, "Methods for Assessing, Predicting, and Improving Data Veracity: A survey," in *Advances Distributed Computing And Artificial Intelligence Journal (ADCAIJ)*, November 2020.
5. S.Alghamdi and **F.Y. Assiri**, "Solving the Cold-Start Problem in Recommender Systems Using Contextual Information in Arabic from Calendars," in *Arabian Journal of Science and Engineering*, September 2020.
6. **F.Y. Assiri**, "Rewarding System to Solve Traffic Congestion in Saudi Arabia," in *Technology Education Management Informatics (TEM) Journal*, August 202.
7. **F. Y. Assiri** and H. Elazhary, "Automated Java exceptions explanation using natural language generation techniques," in *Computer Applications in Engineering Education*, 28(3), 626-644, 2020.
8. S.Alghamdi and **F.Y. Assiri**, "A Comparison of fastText Implementation Using Arabic Text Classification," in *proceeding of IntelliSys*, 2019.
9. **F.Y. Assiri** and R. Mehmood, "Software Quality in the era of Big Data, IoT, and Smart Citie," in Mehmood R., See S., Katib I, Chalmtac I. (eds) *Smart Infrastructure and Applications*, EAI/Springer Innovation in Communication and Computing Springer, Cham, 2019.
10. **F.Y. Assiri** and J.M. Bieman, "MUT-APR: MUTation-based Automated Program Repair Research Tool," in *Proceedings of the Future of Information and Communication Conference (FICC)*, August 2018.
11. **F.Y. Assiri**, R. Alsharbary, E. Algahmdi, A. Alahmadi, A. Aljehani, and R. Alahmari, "Congenital Heart Defect Monitoring System for Children Using Internet of Things," *International Journal of Computer Applications (IJCA)*, August 2017 Edition
12. **F.Y Assiri**, "Recommendations to Improve Students Programming Skills," In *Proceeding of the Science and Information Conference (SAI)*, 2016
13. **F.Y. Assiri** and J.M. Bieman, "Fault Localization for Automated Program Repair: Effectiveness, Performance, and Repair Correctness," In the *Software Quality Journal (SQJ)*, 2016.
14. **F.Y. Assiri** and J.M. Bieman, "The Impact of Search Algorithms in Automated Program Repair," In the *2015 International Conference on Soft Computing and Software Engineering (ScSe)*, 2015.
15. **F.Y. Assiri** and J.M. Bieman, "An Assessment of the Quality of Automated Program Operator Repair," in *Proceedings of the Seventh IEEE International Conference on Software Testing, Verification and Validation (ICST)*, 2014.