1. **Personal Information:**

   Name   Lamya Ibraheem A Albraheem
   P.O.Box   98929 Riyadh 11663 Saudi Arabia
   Email   lalbraheem@ksu.edu.sa
   Phone#   0500888854

2. **Education :**

   Bachelor of Computer and Information Sciences, First Class Honors   2006
   College of Computer and Information Sciences, King Saud University, Riyadh,
   Saudi Arabia

   Master in Computer Science   2010
   College of Computer and Information Sciences, King Saud University, Riyadh,
   Saudi Arabia

   Ph.D. in Computer Science   2017
   College of Computer and Information Sciences, King Saud University, Riyadh,
   Saudi Arabia

3. **Academic experience:**

   Teacher Assistant   2008 - 2010
   Information Technology department , College of Computer and Information
   Sciences, King Saud University.

   Lecturer   2010 – 2017
   Information Technology department College of Computer and Information
   Sciences, King Saud University

   Assistant Professor   2017- 2024
   Information Technology department, College of Computer and Information
   Sciences, King Saud University

   Associate Professor   Now
   Information Technology department, College of Computer and Information
   Sciences, King Saud University

4. **Service activities (within and outside of the institution)**:

Committees at King Saud University

Scientific Research Committee Chair, KSU, Riyadh, Saudi Arabia	2018
Quality Assurance Committee Member, KSU, Riyadh, Saudi Arabia	2018
Academic Advising Committee Member, KSU, Riyadh, Saudi Arabia	2019
Human Resource Committee Member, KSU, Riyadh, Saudi Arabia	2019 2021 2022
Projects Advisory Committee Member, KSU, Riyadh, Saudi Arabia	2021
IT Master Committee Chair, KSU, Riyadh, Saudi Arabia	2022, 2023

Reviewers for international journals and conference such as :

IEEE Access -SCIE Indexed Q1
Plos one - SCIE Indexed Q1
Transactions on Emerging Telecommunications Technologies
Journal of King Saud University
International Conference on Computing (ICC2019)

5. **Certifications:**

ROS certification, Robot Operating System (ROS) training program, Robotics and
Internet of things Lab, 2018
Internet of Drones , Robotics and Internet of things Lab, 2018
Data Science with Tableau , Robotics and Internet of things Lab, 2020

6. Projects supervision:

GIS-based Model for Wind farm Site Selection using GIS-AHP in the Red Sea	2021- Now
Master	**Year**
Geospatial Analysis of Wind Energy in Saudi Arabia using GIS-FAHP Based Technique	2021- 2023
Geospatial Analysis of Wind Energy in Saudi Arabia using GIS-AHP Based Technique	2021- 2023
Geospatial Analysis of Solar Energy in Riyadh using GIS-AHP Based Technique	2021
Indoor Localization Approach using Hybrid approach of VLC and BLE	2021- 2023
Bachelor	**Year**
IoT based Smart Street Lighting System	Now
IoT based Smart Plugs electricity monitoring system	2021
Assets Localization System Using Light Fidelity Technology in Smart Building	2019
Designing a Li-Fi-Based Hierarchical IoT Architecture for smart cities	2018
Developing A Smart City Project Using Proximity Marketing Technology	2017
Location Aware System for Content Delivery using Bluetooth Low Energy Technology	2016
Identifying Objects for Visually impaired Using Human-Powered Technology	2015

7. Honors and awards:

- Best Paper award in the 2015 IEEE International Conference on Cloud Computing (ICCC).
- List of awards for the Graduation Project : "Location Based Content Using IBeacon Technology (2016)", Students : Jawaher Al-Yahya, Amal Alabdulkarim, Nouf Al-Rowais, Sara Al-Shathri , Lamees Alsuhaibani
  - Best Poster Presentation Award, in the 8th Annual Undergraduate Research Conference on Applied Computing, Zayed University, Dubai, UAE, 2016.

o 2nd Best Graduation Project, in the Annual Computer Science Graduation Projects Competition, Advanced Electronics Company and King Saud University, Riyadh, Saudi Arabia, 2016.

o 2nd Best Graduation Project, in the 5th Annual IT Project Fair, King Saud University, Riyadh, Saudi Arabia, 2016.

8. Publications:

1. Al-Braheem, L., & Al-Furiah, S. (2009). *Comprehensive study on methods of fraud prevention in credit card e-payment system.* Paper presented at the Proceedings of the 11th International Conference on Information Integration and Web-based Applications and Services, Kuala Lumpur, Malaysia.ACM

2. Al-Eidan, R. B., Al-Braheem, L., & El-Zaart, A. (2010). *Line detection based on the basic masks and image rotation.* Paper presented at the 2nd International Conference on Computer Engineering and Technology (ICCET), Chengdu. IEEE

3. Al-Braheem, L., and Alnuem M (2012). Automated Usability Testing : A Literature Review and an Evaluation. International Journal of Information Technology & Computer Science (IJITCS) (ISSN No : 2090-0266) 2 , 1 - 13.

4. Albraheem, L., & Al-Khalifa, H. S. (2012). *Exploring the problems of sentiment analysis in informal Arabic*. Paper presented at the Proceedings of the 14th International Conference on Information Integration and Web-based Applications and Services, ACM

5. Albraheem, L., M. AlRodhaan, and A. AlDhelaan, Toward Designing Efficient Service Discovery Protocol in Vehicular Networks, in Internet of Vehicles – Technologies and Services, R.H. Hsu and S. Wang, Editors. 2014, Springer International Publishing. p. 87-98.

6. Lamya Albraheem, Reem AlDosari, Sara AlKathiri, Hessah AlMotiry, Hind Abahussain, Lama AlHammad, Masheal Alshehri, *Toward designing efficient application to identify objects for visually impaired*, in *The 14th IEEE International Conference on Computer and Information Technology (CIT 2014)* 2014, IEEE: Xi'an, Shaanxi, China

7. Lamya Albraheem, Reem AlDosari, Sara AlKathiri, Hessah AlMotiry, Hind Abahussain, Lama AlHammad, Masheal Alshehri, "Third Eye: An Eye for the Blind to Identify Objects Using Human-Powered Technology", *Cloud Computing (ICCC) 2015 International Conference on*, Riyadh, pp. 1-6, 2015.

8. L. AlBraheem, J. Al-Yahya, N. Al-Rowais, S. Al-Shathri, L. Alsuhaibani, and A. Alabdulkarim, "Location based content delivery using iBeacon Technology," *Proceedings of the SAI Intelligent Systems Conference (IntelliSys 2016)*, London, UK, 21-22 September 2016, Springer

9. L. AlBraheem, J. Al-Yahya, N. Al-Rowais, S. Al-Shathri, L. Alsuhaibani, and A. Alabdulkarim, "Location Aware System for Content Delivery using Bluetooth Low Energy Technology," *Proceedings of the 18th International Conference on Information Integration and Web-based Applications and Services - iiWAS '16, Singapore, 28-30 November,2016, ACM, 394-400 DOI: https://doi.org/10.1145/3011141.3011187.*

10. Al-Yahya J., Al-Rowais N., Al-Shathri S., Alsuhaibani L., Alabdulkarim A., AlBraheem L. (2018) Toward Designing an Efficient System for Delivering Contextual Content. In: Bi Y., Kapoor S., Bhatia R. (eds) Intelligent Systems and Applications. IntelliSys 2016. Studies in Computational Intelligence, vol 751. Springer, Cham

11. Albraheem, Lamya & Al-Abdulkarim, Amal & Al-Dosari, Arwa & Al-Abdulkarim, Leena & Al-Khudair, Raghad & Al-Jasser, Wafa & Al-Angari, Weam. (2017). Smart city project using proximity marketing technology. 177-183. 10.1109/IntelliSys.2017.8324288. London, UK, 7-8 September 2017

12. L. I. Albraheem, L. H. Alhudaithy, A. A. Aljaser, M. R. Aldhafian and G. M. Bahliwah, (2018) "Toward Designing a Li-Fi-Based Hierarchical IoT Architecture," in *IEEE Access*, vol. 6, pp. 40811-40825,. doi: 10.1109/ACCESS.2018.2857627

13. Albraheem, L., M. AlRodhaan, and A. AlDhelaan (2021). *Bus-Based WSMP Dissemination Protocol for Vehicular Network.* Paper presented at the Proceedings of the 23rd International Conference on Information Integration and Web Intelligence (iiwas2021), Linz, Austria ,ACM.

14. Maram Bahareth , Raseel Alsakran , Dhuha Alqahtani ,Lamya Albraheem (2021), *MedThings: A Model Based on Cloud Computing and IoT to Support E-Health Systems in Saudi Arabia.* Future Technologies and Innovations (FTI) Proceedings: 4th international conference on computer applications and information security (iccais'2021), March 19, 2021, Tunisia

15. Lama AlAwlaqi, Amaal AlDawod, Ray AlFowzan, Lamya AlBraheem, (2021), *The Requirements of Fog/Edge Computing-Based IoT Architecture,* IEEE 12th Annual Ubiquitous Computing, Electronics & Mobile Communication Conference (UEMCON), 1- 4December 2021, New York, USA.

16. AlMazrua, H., Alshehri, A., Asiri, M., Almasaud, A., Albraheem, L. (2022). Cloud Robotics Knowledge Sharing Survey. In: Yang, XS., Sherratt, S., Dey, N., Joshi, A. (eds) Proceedings of Seventh International Congress on Information and Communication Technology. Lecture Notes in Networks and Systems, vol 465. Springer, Singapore. https://doi.org/10.1007/978-981-19-2397-5_49

17. Albraheem, Lamya, and Leena Alabdulkarim. 2021. "Geospatial Analysis of Solar Energy in Riyadh Using a GIS-AHP-Based Technique" ISPRS International Journal of Geo-Information 10, no. 5: 291. https://doi.org/10.3390/ijgi10050291

18. Albraheem L, Alhudaithy L, Aljaser A, AlDhafian M, Bahliwah G. 2022. Towards smart sustainable cities using Li-Fi technology: geo-location infrastructure utilizing LED street lights. PeerJ Computer Science 8:e1009 https://doi.org/10.7717/peerj-cs.1009

19. Albraheem L, Alshathri H, Alsheddi R, Alotaibi R, Alkharashi G. Hybrid asset localization using light fidelity and Bluetooth Low Energy. PLoS One. 2022 Sep 29;17(9):e0274452. doi: 10.1371/journal.pone.0274452. PMID: 36173962; PMCID: PMC9521922.

20. Lamya Albraheem and Lama Alaolaqi, Geospatial Analysis of Wind Energy in Saudi Arabia using GIS-AHP Based Technique, Energy Reports,Volume 9,2023, Pages 5878-5898, ISSN 2352-4847, https://doi.org/10.1016/j.egyr.2023.05.032.

21. M. Alghamdi, G. Alsaab, N. Alsunbol and L. Albraheem, "Energy-Efficiency in Cloud Datacenters: A Survey," *2023 International Conference on IT Innovation and Knowledge Discovery (ITIKD)*, Manama, Bahrain, 2023, pp. 1-7, doi: 10.1109/ITIKD56332.2023.10099685.

22. F. AlZahrani, Z. Almutairi, R. AlRowis, R. AlNaseer and L. Albraheem, "Autonomic Management of Cloud Resources to meet Service Level Agreement," *2022 OPJU International Technology Conference on Emerging Technologies for Sustainable Development (OTCON)*, Raigarh, Chhattisgarh, India, 2023, pp. 1-6, doi: 10.1109/OTCON56053.2023.10114010.

23. G. Alrehaili, N. Galam, R. Alawad and L. Albraheem, "Cloud-Based Big Data Analytics on IoT Applications," *2023 International Conference on IT Innovation and Knowledge Discovery (ITIKD)*, Manama, Bahrain, 2023, pp. 1-8, doi: 10.1109/ITIKD56332.2023.10100150.

24. Albraheem, L.; Alawad, S. A Hybrid Indoor Positioning System Based on Visible Light Communication and Bluetooth RSS Trilateration. Sensors 2023, 23, 7199. https://doi.org/10.3390/s23167199

25. Lamya Albraheem and Leena Alabdulkarim, Design and Implementation of Site suitability Model of Solar Energy in Riyadh using GIS-AHP Approach, (accepted paper, conference April 2023)

26. L. Albraheem, H. Alajlan, N. Aljenedal, L. A. Alkhair, and S. B. Gwead, 'An IoT-based Smart Plug Energy Monitoring System', *IJACSA*, vol. 14, no. 10, 2023, doi: 10.14569/IJACSA.2023.0141038.

27. Raghad Alnashwan, Malak Mashaabi, Areej Alotaibi, Hala Qudaih, and Lamya Albraheem. 2024. IoT Based Accident Prevention System using Machine Learning techniques. In Proceedings of the 2023 6th Artificial Intelligence and Cloud Computing Conference (AICCC '23). Association for Computing Machinery, New York, NY, USA, 179–188. https://doi.org/10.1145/3639592.3639617

28. Lamya Albraheem and Lama Alaolaqi, Geospatial Analysis of Wind Energy in Saudi Arabia using GIS-FAHP Based Technique, (under reviewing)

29. L. Albraheem, M. Al-Rodhaan, and A. Al-Dhelaan, "Publish-Subscribe Service Dissemination Protocol in Vehicular Network". (under processing)