ENGR AMNA

Agricultural Engineer

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Academic Qualifications:

Sr.	Degree	Board/University	Marks /CGPA	Specialization / Major	Year
1	M.Sc. (Hons.) Agricultural Engineering	University of Agriculture, Faisalabad	3.93/4.00	Farm Machinery and Power	2020-2022
2	B.Sc. Agricultural Engineering	University of Agriculture, Faisalabad	3.92/4.00 (Gold Medal)	Farm Machinery & Power, Irrigation & Drainage, Structures and Environmental Engineering	2014-2018
3	F. Sc. Pre- Engineering	BISE Faisalabad	947/1100	Physics, Mathematics, Chemistry	2012-2014
4	Secondary School Certificate	BISE Faisalabad	989/1050	Physics, Mathematics, Chemistry, Biology	2010- 2012

Working Experience:

Sr.	Duration	Title and Name of University/Organization
1	October 2024 to Date	Working as Assistant Executive Engineer (Lab Engineer) (BPS-17) in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad.
2	January 2024 to June 2024	Worked as Visiting Lecturer in the Department of Farm Machinery and Power, Faculty of Agricultural Engineering and Technology, University of Agriculture, Faisalabad.
3	December 2022 to June 2023	Worked as Research Assistant (Precision Agriculture) in project titled "Establishment of National Center in Big Data and Cloud Computing (NCBC-PAAL)", Center of Advanced Studies in Agriculture and Food Security (CAS-AFS), University of Agriculture, Faisalabad.
4	May 2017 to July 2017	Internship on "Analysis of Rainfall Potential, ET Loss, & Evaluating Water use Efficiency in Pothowar Area." Climate Change, Alternate Energy & Water Resources Institute(CAEWRI), NARC, Islamabad
5	July 17, 2017 to July 29, 2017	Participated as Surveyor in "Survey Camp 2017 in Chakwal" By Department of Structures and Environmental Engineering, Faculty of Agricultural Engineering & Technology, University of Agriculture, Faisalabad.

Research Work:

Sr.	Duration	Title and Name of University/Organization
1	2021 to 2022	M.Sc. research titled "Development of Machine Vision Based Fruit Sorting System"
		Department of Farm Machinery and Power, Faculty of Agricultural Engineering & Technology, University of Agriculture, Faisalabad.
2	2017 to 2018	Final year project on "Variable Rate Application Through Machine Automation in Precision Agriculture."
		Department of Farm Machinery and Power, Faculty of Agricultural Engineering & Technology, University of Agriculture, Faisalabad.

Journal Publications:

1. *Amna, M. W. Akram, G. Li, M. Z. Akram, M. Faheem, M. M. Omar, M. G. Hassan, (2023). Machine Vision Based Automatic Fruit Quality Detection and Grading. Frontiers of Agricultural Science and Engineering. (IF 3.7)

Conference Papers:

1. Abstract published in "International Conference on Precision and Sustainable agriculture under Climate Change (IPSAC-2023)" entitled "Development of Machine Vision based Automatic Sorting and Grading System for Tomatoes".

Trainings/ Workshops/ CPDs:

- 1. One day PEC-CPD webinar on, "Leadership and Management" on March 22, 2025.
- 2. One day PEC-CPD webinar on, "Entrepreneurship for Engineers" on March 20, 2025. Three days
- 3. International Training on "Crop Yield Estimation and Water Accounting Using Remote Sensing" on January 10-12, 2023 organized by CAS-AFS, University of Agriculture, Faisalabad.
- 4. Hands-on training on flight planning, flight, and post-flight image processing using fixed wing drone (EBEE X).
- 5. Three days CPD training workshop on "Use of Simulation Software for Reverse Engineering of Agricultural Machinery" on May 10-12, 2022.
- 6. Half-day live webinar on "Leadership and Engineering: A dichotomy or Misunderstanding" on June 19, 2021.
- 7. Half-day live webinar on "Awareness on PEC Initiative on Innovation and Entrepreneurship" on June 11, 2021.
- 8. Half-day live webinar on "Investment Readiness Program" on June 3, 2021.
- 9. Half-day live webinar on "Women Engineers as Freelancers" on June 1, 2021.
- 10. Half-day live webinar on "Massive Connectivity in 5G+ Network for Smart Cities" on June 1, 2021.
- 11. Half-day live webinar on "Self-Discovery with Talent Management Achieving Excellence in Your Professional Career" on May 7, 2021.
- 12. Half-day live webinar on "Young Engineers as Future Consultant" on May 5, 2021.
- 13. Half-day live webinar on "Entrepreneurship Development by Managing Technology and Innovation in Water and Wastewater Treatment Projects" on April 10, 2021.
- 14. Half -day CPD live webinar on "Development of Technical Team & Execution of a Project" on April 3, 2021.
- 15. Half -day CPD live webinar on "**Development of Technical Team & Execution of a Project (Part-II)**" on March 26, 2021.
- 16. Training workshop on, "Scientific Writing and Professional Networking" organized by Society of Engineers and Technologists, FAET, University of Agriculture, Faisalabad on January 8, 2021.
- 17. One day PEC-CPD workshop/webinar on, "**Solar Power Generation**" organized by WAPDA Engineering Academy, Faisalabad on December 31, 2020.
- 18. One day PEC-CPD workshop/webinar on, "**Hydrological Modeling Using HEC-HMS**" organized by WAPDA Engineering Academy, Faisalabad on December 29, 2020.
- 19. Webinar on, "Improving Research Planning Skills Using Elsevier Tools-Scoupus and Science-Direct" organized by University of Agriculture, Faisalabad on December 22, 2020.

20. International PEC-CPD Workshop on, "**Hydrological Monitoring Technologies**" organized by Department of Structures and Environmental Engineering, FAET, University of Agriculture Faisalabad on February 17,2020.

Co curricular achievements:

- 1. **First position** in **Science Quiz** (**10**th) in district Faisalabad organized by District Sport Tournament & Literary Competition in 2011-12 sessions.
- 2. **First position** in **Science Quiz** (10th) in BISE Faisalabad organized by BISE Faisalabad in 2011.
- 3. **First position** in **Science Quiz** (9th) in district Faisalabad organized by District Sport Tournament & Literary Competition in 2010-11 sessions.
- 4. Third position in Science Quiz (9th) in BISE Faisalabad organized by BISE Faisalabad in 2010.
- 5. **Third position** in **Digital Poster Competition** on the eve of World Soil Day December 05, 2020 organized by Society of Engineers & Technologists, University of Agriculture, Faisalabad.

Awards / Honors:

- 1. Gold Medal in B. Sc. Agricultural Engineering by University of Agriculture, Faisalabad in 2018 batch.
- 2. **Shield of Excellence** by the Faculty of Agricultural Engineering, University of Agriculture, Faisalabad in 2018.
- 3. **Merit Scholarship** from the University of Agriculture, Faisalabad.
- 4. **Excellence Award** by Azam-e-Alishan awards in 2016.
- 5. **Laptop** by PM Laptop Scheme.

Computer Skills:

Know the basics of

- > Auto-CAD
- > Image Processing using Python
- ➤ SolidWORKS
- ➤ MS Word, Power Point, Excel
- ➤ Real time Landscaping
- > ArcGIS, QGIS
- ➤ Automation Studio 5.0

Personal Skills & Capabilities:

- > Self-motivated to learn
- ➤ Working in group
- > Time Management skills
- ➤ High level of responsibility