

Ahmad Hassan, PhD

HEC Approved PhD Supervisor

ahmadhassan@pucit.edu.pk | Lahore, Pakistan

Summary

HEC-approved PhD Supervisor and academic with over a decade of experience teaching Computer Science at the university level, specializing in Machine Learning, Bioinformatics, Data Science, and Operating Systems. Published author of nine peer-reviewed journal articles on computational biology and machine learning. Prior industry background as a Software Engineer/Developer building web and desktop applications.

Education

PhD in Computer Sciences — University of Management and Technology, Lahore, Pakistan

M.Phil in Computer Sciences — University of Management and Technology, Lahore, Pakistan

BS in Computer Sciences — University of Central Punjab, Lahore, Pakistan

Work Experience

Faculty Member — *Department of Computer Science, University of the Punjab*

- Taught undergraduate and graduate courses including Operating Systems, Machine Learning, Data Science, and Bioinformatics.
- Published research articles in reputable journals on Machine Learning and Bioinformatics.
- Supervised students in academic projects and thesis work.

Faculty Member — *School of Systems Technology, University of Management & Technology*

- Delivered engaging lectures and facilitated interactive classroom discussions.
- Developed and delivered workshops on bioinformatics and biodata analysis.
- Mentored and advised students on academic and career goals, improving student outcomes.
- Published research articles and presented findings at national conferences.

Software Engineer — *Ghost Softwares*

- Developed system applications using C++, Java, and VS.Net frameworks.
- Collaborated with cross-functional teams to design and implement scalable software solutions.
- Utilized agile methodologies to deliver high-quality software within specified deadlines.
- Conducted thorough code reviews and implemented continuous integration and deployment practices.

Software Developer — *Tower Technologies (Pvt) Ltd*

- Developed web applications using PHP and modern frameworks.
- Created and optimized database designs; implemented SQL queries and performance tuning.
- Worked collaboratively in agile development teams, ensuring code quality and meeting deadlines.
- Integrated third-party APIs and services, such as payment gateways and social media platforms.

Journal Publications

- Butt, A. H., Khan, S. A., Jamil, H., Rasool, N., & Khan, Y. D. (2016). A prediction model for membrane proteins using moments based features. *BioMed Research International*, 2016.
- Butt, A. H., Mahmood, M. K., & Khan, Y. D. (2016). An exposition analysis of facial expression recognition techniques. *Pakistan Journal of Science*, 68(3).
- Butt, A. H., Rasool, N., & Khan, Y. D. (2017). A treatise to computational approaches towards prediction of membrane protein and its subtypes. *The Journal of Membrane Biology*, 250(1), 55–76.
- Butt, A. H., Rasool, N., & Khan, Y. D. (2018). Predicting membrane proteins and their types by extracting various sequence features into Chou's general PseAAC. *Molecular Biology Reports*, 45(6), 2295–2306.
- Butt, A. H., Rasool, N., & Khan, Y. D. (2019). Prediction of antioxidant proteins by incorporating statistical moments-based features into Chou's PseAAC. *Journal of Theoretical Biology*, 473, 1–8.
- Butt, A. H., & Khan, Y. D. (2019). Prediction of S-Sulfenylation sites using statistical moments-based features via Chou's 5-Step rule. *International Journal of Peptide Research and Therapeutics*, 1–11.
- Butt, A. H., & Khan, Y. D. (2019). CanLect-Pred: A cancer therapeutics tool for prediction of target cancerlectins using experiential annotated proteomic sequences. *IEEE Access*, 8, 9520–9531.
- Butt, A. H., et al. (2022). A machine learning technique for identifying DNA enhancer regions utilizing cis-regulatory element patterns. *Scientific Reports*, 12, 15183.
- Butt, A. H., et al. (2023). Ensemble learning for hormone binding protein prediction: A promising approach for early diagnosis of thyroid hormone disorders in serum. *Diagnostics*, 13(11), 1940.

Certifications & Training

- Participant, PHEC Training Workshop on “Generative AI Based Techniques in Advanced Teaching Methods.”
- Participant, PHEC Training on “Advancing Teaching Excellence: Strategies for Effective Higher Education Instruction and Professional Development.”
- Participant, Workshop on “Effectively Managing Post-Graduate Thesis Supervision.”