

Muhammad Raees

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Objective

Seeking an internship as a Data Scientist to apply my data-driven problem-solving skills in a dynamic and collaborative environment.

Education

Aug. 2022–Present	A Ph.D. Candidate in Computing & Information Sciences – 4.0/4.0 CGPA Rochester Institute of Technology (RIT) , Rochester, NY
Feb. 2015 – Apr. 2017	Master of Science – Software Engineering – 4.0/4.0 CGPA Bahria University Islamabad Campus (BUIC) , Pakistan
Oct. 2013 – Jan 2014	Bachelor of Science – Software Engineering – 3.87/4.0 CGPA Mirpur University of Science and Technology , Pakistan

Professional Experience

Aug. 2022 – Present	Research Assistant , Sappi-RIT Digital Innovation Lab. RIT. NY In a composite role with Sappi Digital Transformation. Leveraging a blend of qualitative and quantitative techniques to gain profound insights into how individuals utilize contemporary machine learning technologies to enhance their work productivity. Demonstrated expertise in crafting innovative analytical methodologies and effectively communicated actionable findings through research publications and presentations to high-level stakeholders. Collaborating seamlessly with influential Business Leaders to architect and execute data-driven strategies. Pioneered a culture of collaboration within Sappi's talented workforce, driving innovation through hands-on experimentation, data-driven decision-making processes, and user experience innovations. https://www.sappi.com/launching-the-sappi-rit-digital-innovation-lab
Aug 2023 – Present	Data Expert , (Volunteer) – DataKind, USA. Dedicatedly collaborating with DataKind, leveraging data science and AI to address community challenges. Engaged in a transformative project with Fundacion Capital, aimed at harnessing the power of data-driven insights. Contributed expertise to optimize economic opportunities, and financial practices, and make informed decisions within the digital realm. https://www.datakind.org/
July 2017 – July 2022	Lecturer , Mirpur University of Science & Technology, Pakistan. Engaged actively in higher education, balancing teaching responsibilities with research, student mentorship, and departmental management. It helped me foster a culture of teaching and learning through the exchange of knowledge with students and colleagues. Additional functions included hands-on practical demonstrations and experiment supervision. http://www.must.edu.pk/engineering/SW/faculty.html
Feb. 2014 – June 2017	Software Engineer , Aurora Solutions Private Limited, Pakistan Worked closely with the QbTech team to launch the QbCheck web application for attention span measuring. Employed cutting-edge technologies to build effective systems in ADHD testing. Managed development, automated testing, and continuous deployment to servers. http://www.aurorasolutions.io
Mar. 2013 – Nov. 2013	Web Developer , Azad Info Tech, Mirpur AJK, Pakistan Worked on writing and deploying several customer-driven products on Windows and the web using the .NET framework. http://www.azadinfotech.com

Publications and Accepted Work

Conference Paper	Raees, M. , Khan VJ., Papangelis, K. 2023. "Four Challenges for IML Designers: Lessons of an Interactive Customer Segmentation Prototype in a Global Manufacturing Company" In Proceeding of the 2023 CHI Conference on Human Factors in Computing Systems (CHI '23). ACM.
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Conference Paper	Manzoor, S., Ali, N., Raees, M. , Khan, KA., Ahmed, A., Ayub, MU. 2022 Ancient coin classification based on recent trends of deep learning. VIPERC2022: 1st International Virtual Conference on Visual Pattern Extraction and Recognition for Cultural Heritage Understanding.
Journal Paper	Khan, KA., Dar, SH., Fazilat, S., Raees, M. , Ahmed, A. Mir, AA. 2022. "An intelligent sentiment analysis system based on recent trends in machine learning", Science International, Issue 34.3, 2017-224.
Journal Paper	Raees, M. , et al. 2021. "Context-Aware Services Using MANETs for Long-Distance Vehicular Systems: A Cognitive Agent-Based Model." Scientific Programming. https://doi.org/10.1155/2021/8835859
Journal Paper	Raees, M. 2020. "Study of Software Quality Improvement through Reliability Metrics Models and Root Cause Analysis Program." International Journal of Computer Engineering and Information Technology 12.6.
Journal Paper	Dar, SH., Ahmed, J., Raees, M. 2016. "Characterization of flexible wearable antenna based on rubber substrate." Int. J. Adv. Comput. Sci. Appl. IJACSA.
Journal Paper	Riaz, F. Shah, SI. Raees, M. Shafi, I. Iqbal, A. "Lateral Pre-crash sensing and avoidance in emotion enabled cognitive agent-based vehicle-2-vehicle communication system." International Journal of Communication Networks and Information Security 5.2 (2013): 127.
Accepted Work	Raees, M. et Al. 2017. "Agent-based Model for Smart Long Distance Transport System". International Conference on Computing and Mathematical Sciences IBA Sukkur, Pakistan.
Accepted Work	Ahmed, A, Khan TA, Raees, M. 2017. "Context-aware Advertisement in Accepted Work Rapid Transit Systems". International Conference on Computing and Mathematical Sciences IBA Sukkur, Pakistan.

Professional Skills

Programming Languages	Python, R, JavaScript, PHP, SQL
Platforms and Tools	Vertex AI, Jupyter, Big Query, Tableau, Plotly Dash, Pandas, Sci-kit Learn, TensorFlow, VS Code, Git, Docker, Pandas Selenium, Scrappy, NLTK Adobe XD, Google Cloud Platform, Figma, Canva
Research & Design	A/B Testing, Benchmarking, Affinity Diagramming, Thematic Analysis, Experiment Design, Interview, Observation, Participatory Design, Survey Prototyping (Low-High Fidelity), Persona, Storyboarding, Wireframing Exploratory Data Analysis, Feature Engineering, Machine Learning, Data Science, Visualization, Product Development
Courses and Specializations	Machine Learning on Google Cloud IBM Data Science, Google Data Analytics, Google Business Intelligence, Data Visualization with Tableau, Building Data Products Google UX Design, Google Digital Marketing & E-Commerce Humanities Responsible Conduct of Research.
Other Activities	Data Mining, Scraping, and Information Extraction, Browser Automation Dashboards for Good, Content Writing, GIS Visualization

Additional Works and Achievements

Workshops/Short Courses	Master Trainers – Faculty Professional Development Program at Higher Education Commission, Islamabad July 11 to Aug 31, 2017. Writing Technical Reports using LaTeX at Mirpur University of Science and Technology. April 28, 2021.
Awards and Achievements	Graduate Research Scholarship for Ph.D. from Industry. Scholarship Award HEC Pakistan, Overseas Scholarship Program for Ph.D. Scholarship Award HEC Pakistan, ASDIS for Ph. D. Gold-Medallist in Masters – Summa Cum Laude Merit-based Scholarship in Masters (50%-75% Tuition Fee Waiver) Second Position Holder in Bachelor

Courses Taught Regularly	Machine Learning and Programming (Python, Sci-kit Learn, TensorFlow, Jupiter, and C++) Web Development (PHP, SQL, ASP.NET) Human-Computer Interaction
Projects	QB check ADHD: http://www.qbcheck.com I-Tax Online: http://www.itaxonline.co.uk Elixir-Tax: https://www.elixir-tax.co.uk Image Classification Based on Ancient Coins. Sentiment Analysis Based on Tweets.
Other activities	Reviewer for ACM CHI'23 – Reviewed 2 extended abstract submissions. Reviewer for CSCW, ICIS, OzCHI, CHIPlay, VIS Course Book "Web Design-I" for Allama Iqbal Open University, Pakistan. Registered Engineer with Pakistan Engineering Council.
References	References are available upon request.