

MAHFUZ ISLAM KHAN JABED

Woodbridge, Virginia, USA | mahfuzislamkhanjabed@gmail.com | +1 (573) 587-3925

[LinkedIn](#) | [Google Scholar](#) | [ResearchGate](#) | [ORCID](#) | [GitHub](#) | [IEEE Xplore](#) | [Portfolio](#)

PROFESSIONAL SUMMARY

Information Technology graduate student specializing in Machine Learning and Explainable AI (XAI), with peer-reviewed publications in IEEE-indexed venues. Experience designing, training, and evaluating deep learning, ensemble, and time-series forecasting models for financial analytics, workforce analytics, and medical imaging applications.

AREAS OF EXPERTISE

- Machine Learning: supervised learning, stacking/ensemble modeling, feature engineering, and model evaluation (accuracy, precision, recall, F1, ROC).
- Deep Learning: CNN and LSTM modeling; computer vision workflows for medical image classification.
- Explainable AI: SHAP-based model interpretability and transparent decision support.
- Time-Series Forecasting: predictive modeling for financial market analytics.
- Data Analysis & Visualization: Python-based analysis and reporting for model insights.

EDUCATION

Washington University of Science and Technology, Alexandria, VA, USA

Master of Information Technology (CGPA: 4.00) — Expected Graduation: December 2026

The Millennium University, Dhaka, Bangladesh

Bachelor of Science in Computer Science and Engineering (CGPA: 3.40) — Graduated: January 2024

TECHNICAL SKILLS

Programming & Tools

- Python; Jupyter Notebook; PyCharm; scikit-learn; TensorFlow; PyTorch.
- Microsoft Excel; HTML/CSS; WordPress; Google Analytics.

CORE QUALITIES

- Analytical thinking and structured problem solving.
- Technical communication (research writing, documentation, and presentations).
- Team collaboration and attention to detail.

RESEARCH INTERESTS

Predictive modeling for finance and risk forecasting; explainable artificial intelligence (XAI); deep learning for medical image analysis; workforce analytics; and AI applications for healthcare and economic systems.

RESEARCH & PUBLICATIONS

Peer-Reviewed / Accepted

MSRFF: An Interpretable CNN-Vision Transformer Framework for Diabetic Retinopathy Detection.

Accepted for publication in Proceedings of the 2026 IEEE International Conference on Computational Intelligence and AI Applications (ICCIAA). (Feb 2026)

- Contributed to hybrid CNN–Vision Transformer architecture design, training, and performance evaluation for retinal image classification.

A Stacking Ensemble Framework for Predicting Employee Turnover: Explainable AI with SHAP.

Proceedings of the 2025 IEEE 2nd International Conference on Computing, Applications and Systems (COMPAS), IEEE Xplore (2026). DOI: 10.1109/COMPAS67506.2025.11381730. (Feb 2026)

- Contributed to development and evaluation of a stacking ensemble integrating multiple base learners with SHAP-based interpretability for employee attrition prediction.

Stock Market Price Prediction using Machine Learning Techniques.

American International Journal of Sciences and Engineering Research. Published Feb 3, 2024.

DOI: 10.46545/aijser.v7i1.308.

- Researched ML techniques for stock market price prediction using 10 Dhaka Stock Market companies and 6 large international companies.
- Reported impact metrics: 28 citations and 4,000+ reads (as stated in provided resume source).

SELECTED PROJECTS

Haberman Cancer Survival Observation Using Machine Learning (Spring 2024)

- Analyzed cancer survival data and built predictive models to estimate patient survival outcomes.
- Performed preprocessing, feature selection, model training, and evaluation using standard performance metrics.

Basic Image Classification Using TensorFlow (Fall 2023)

- Developed a CNN image classifier; applied data processing and augmentation to improve performance.
- Visualized learning curves and results using Matplotlib and TensorBoard.

Movie Recommendation System Using Collaborative Filtering (Fall 2023)

- Built a recommendation system using collaborative filtering to predict user preferences from historical ratings.
- Implemented in Python (NumPy, pandas, scikit-learn) and evaluated using precision/recall.

PROFESSIONAL EXPERIENCE

Search Engine Optimization (SEO) Executive — Bizcope (Dhaka, Bangladesh) | May 2024 – Sep 2024

- Implemented SEO strategies and optimized WordPress websites to improve search rankings.
- Collaborated on content planning and performance monitoring using web analytics.

Python & Machine Learning Trainee — Creative IT Institute (Remote, Bangladesh) | Jan 2024 – Nov 2024

- Completed training in Python programming and machine learning fundamentals.
- Practiced data analysis and visualization workflows using pandas and Matplotlib.

Machine Learning Intern — Mentorness (Remote, India) | Mar 2024 – Apr 2024

- Supported project-based ML tasks including data preprocessing and model training.
- Gained hands-on exposure to practical ML workflows and algorithm application.

CERTIFICATIONS & PRESENTATIONS

- Certificate of Participation — World's Largest Lesson (Global Goals for Sustainable Development), Supporting SDG 9: Industry, Innovation and Infrastructure (2026).
- Certificate of Presentation — IEEE COMPAS 2025 (Oct 2025). Paper ID: 442.
- Tesla Stock Price Prediction using Facebook Prophet — Coursera Project Network (Jan 2024). Credential ID: MHYQWYRS38P6.
- Facial Expression Recognition with PyTorch — Coursera Project Network (Jan 2024). Credential ID: FKGJBP7XRPVZ.
- Problem Solving (Basic) — HackerRank (Feb 2023). Credential IDs: 83be8eadb43c; 464050961833.

RESEARCH PROFILES

- Personal Website: <https://mahfuzislamkhanjabed.com/>
- GitHub: github.com/jabedkhanjb
- LinkedIn: [linkedin.com/in/jabedkhanjb/](https://www.linkedin.com/in/jabedkhanjb/)
- ResearchGate: [researchgate.net/profile/Mahfuz-Islam-Khan-Jabed](https://www.researchgate.net/profile/Mahfuz-Islam-Khan-Jabed)
- Google Scholar: <https://scholar.google.com/>
- IEEE Xplore Author Profile: ieeexplore.ieee.org/author/759554921648608
- ORCID: orcid.org/0009-0001-2141-2894

NEWS PAPER

1. **AP News** <https://apnews.com/press-release/ein-presswire-newsmatics/ai-researcher-mahfuz-islam-khan-jabed-advances-ethical-explainable-ai-for-workforce-and-healthcare-applications-73c6b8137ec92efdeb76c44bc8884ccf>
2. **National Law Review** <https://natlawreview.com/press-releases/ai-researcher-mahfuz-islam-khan-jabed-advances-ethical-explainable-ai>
3. **WGN 9** <https://wgntv.com/business/press-releases/ein-presswire/893525728/ai-researcher-mahfuz-islam-khan-jabed-advances-ethical-explainable-ai-for-workforce-and-healthcare-applications>
4. **WPIX CW 11** <https://pix11.com/business/press-releases/ein-presswire/893525728/ai-researcher-mahfuz-islam-khan-jabed-advances-ethical-explainable-ai-for-workforce-and-healthcare-applications>
5. **KRON MyNetworkTV 4** <https://www.kron4.com/business/press-releases/ein-presswire/893525728/ai-researcher-mahfuz-islam-khan-jabed-advances-ethical-explainable-ai-for-workforce-and-healthcare-applications>