Sanjeda Sara Jennifer

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Education

Ph.D. in Computer Science, University of Central Florida — Aug 2024 – Present

Masters along the way in Computer Science, University of Central Florida — Aug 2024 – Present

B.S. in Computer Science and Engineering, East West University — Jan 2018 – Jun 2022

Employment History

Graduate Research Assistant (GRA), University of Central Florida — May 2025 – Present

Software Engineer, Dhaka, Bangladesh — Oct 2023 - July 2024

Trainee Software Engineer (Artificial Intelligence), Dhaka, Bangladesh — May 2023 – Sept 2023

Research Assistant (RA), Department of Computer Science and Engineering, East West University — Oct 2022 – Oct 2023

Skills

- **Technical:** Natural Language Processing, Graph Neural Networks, Computer Vision, Machine Learning, Deep Learning, Laravel framework, Bootstrap
- **Software:** Python (NumPy, Pandas, Scikit-learn, PyTorch, TensorFlow, Keras, Hugging Face), ANOVA, SPSS, HTML, CSS, Jupyter Notebook, Google Colab, VSCODE

Project

- **Optimization of Nanobubbles for Targeted Drug Delivery**
- **RNA Secondary Structure Interaction for miRNA/isomiR Target Detection**

Awards and Achievements

ORCGS Doctoral Fellowship, University of Central Florida — 2024-2025

Medha Lalon Scholarship, East West University — 2019-2022

Research Publications

1. **S. S. Jennifer***, F. F. Abir*, L. J. Brattain, N. Yousefi *Hybrid Diffusion Model for Ultrasound Image Augmentation*. Submitted to NeurIPS 2025 Workshop on Imageomics. (NeurIPS 2025 Workshop on Imageomics (Accepted Short Paper). *Equal first-author contribution.
2. **S. S. Jennifer**, E. Hossain, R. R. Chowdhury, H. Hu, & N. Yousefi. *SeqConnect: A Deep Learning Framework for miRNA–mRNA Interaction Prediction*. Submitted to RECOMB 2026 (Manuscript under review).
3. Wei, Y., **S. S. Jennifer**, Omer, N., Ngo, T., Pugazhendhi, D., Aceto, G., Ghattas, J., Adhikary, R., Walck, R., Yousefi, N., Seal, S., & Coathup, M. *New Insights into Bone Toxicity following High Dose Ionizing Radiation Exposure*. (Manuscript under review).
4. S. S. Jennifer, M. H. Shamim, A. W. Reza, N. Siddique. *Sickle cell disease classification using deep learning architectures.* Heliyon, 2023. DOI: 10.1016/j.heliyon.2023.e22203
5. S. S. Jennifer, S. A. Islam, S. S. Koly, R. A. Tuhin, M. S. H. Khan, M. M. Uddin. *Bilinbot: A bilingual chatbot using deep learning.* HORA 2023. DOI: 10.1109/HORA58378.2023.10156681