



Curriculum Vitae

Faculty Name: Md Hossain Shuvo **Work Address:** P.O. Box 519; MS 1060
Prairie View, TX 77446

Position Title: Assistant Professor
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Education:	Degree and Area of Study	Institution Name	Degree Date
	Ph.D. in Computer Science	Virginia Tech	Dec 2023
	M.Sc. in Computer Science	Alabama A&M University	Jul 2017
	B.Sc. in Computer Science	Bangladesh University of Business and Technology	Jul 2014

Teaching Experience	Position Title	Institution Name	Position Dates (Beginning and End)
	Assistant Professor	Prairie View A&M University	Jan 2024 - Present
	Teaching Assistant	Auburn University	Aug 2018 – Jan 2020
	Teaching Assistant	Alabama A&M University	Jan 2017 – Jul 2017
	Assistant Mentor	North Alabama Center for Educational Excellence (NACEE)	May 2016 – Jul 2016
	Lecturer	Dhaka Commerce College	Jan 2015 – Jul 2015
	Lecturer	Dhaka Cambrian College	Jan 2014 – Dec 2014

Professional Publications: M. H. Shuvo, M. Karim, R. Roche, and D. Bhattacharya, "PIQLE: protein-protein interface quality estimation by deep graph learning of multimeric interaction geometries", *Bioinformatics Advances*, 2023, vbad070, 10.1093/bioadv070.

M. H. Shuvo, M. Karim, and D. Bhattacharya, "iQDeep: an integrated web server for protein scoring using multiscale deep learning models", *Journal of Molecular Biology*, 168057, 2023. doi: 10.1016/j.jmb.2023.168057

R. Roche, B. Moussad, M. H. Shuvo, S. Tarafder, D. Bhattacharya, EquipNAS: improved protein-nucleic acid binding site prediction using protein-language-model-informed equivariant deep graph neural networks. *bioRxiv*, 2023.09.14.557719

. R. Roche, B. Moussad, M. H. Shuvo, D. Bhattacharya, "E(3) equivariant graph neural networks for robust and accurate protein-protein interaction site prediction", *PLOS Computational Biology*, 19, e1011435, doi: 10.1371/journal.pcbi.1011435

S. Bhattacharya, R. Roche, M. H. Shuvo, and D. Bhattacharya, "Contact-assisted threading in low-homology protein modeling", *Methods in Molecular Biology book series*, vol. 2627, 2023, doi: 10.1007/978-1-0716-2974-1 3

R. Roche, S. Bhattacharya, M. H. Shuvo, and D. Bhattacharya, “rrQNet: Protein contact map quality estimation by deep evolutionary reconciliation”, *Proteins*, Jun 2022, doi: 10.1002/prot.26394.

M. H. Shuvo, M. Gulfam, and D. Bhattacharya, “DeepRefiner: high-accuracy protein structure refinement by deep network calibration”, *Nucleic Acids Research*, vol. 49, no. W1, pp. W147–W152, Jul. 2021, doi: 10.1093/nar/gkab361

S. Bhattacharya, R. Roche, M. H. Shuvo, and D. Bhattacharya, “Recent Advances in Protein Homology Detection Propelled by Inter-Residue Interaction Map Threading”, *Front Mol Biosci*, vol. 8, p. 643752, 2021, doi: 10.3389/fmolb.2021.643752.

A. Kryshtafovych, . . . , M. H. Shuvo, . . . , “Modeling SARS-CoV-2 proteins in the CASPcommons experiment”, *Proteins*, vol. 89, no. 12, pp. 1987–1996, Dec. 2021, doi: 10.1002/prot.26231.

M. H. Shuvo, S. Bhattacharya, and D. Bhattacharya, “QDeep: distance-based protein model quality estimation by residue-level ensemble error classifications using stacked deep residual neural networks”, *Bioinformatics*,

R. Alapati, M. H. Shuvo, and D. Bhattacharya, “SPECS: Integration of side-chain orientation and global distance-based measures for improved evaluation of protein structural models”, *PLoS One*, vol. 15, no. 2, p. e0228245, 2020, doi: 10.1371/journal.pone.0228245

**Additional
Trainings/Skills:**

Programming skills: Python, Java, C, C++, PHP, ASP, Apache Cordova MySQL, MSSQL

App development skills:

Standalone application development with Java EE

Mobile applications development in both Android and iOS Platforms

Web applications development

Robotic applications development for EV3, NAO, and UAV