

BIOGRAPHICAL SKETCH

Hamidreza Moradi, Ph.D.

<https://www.linkedin.com/in/hamidreza-moradi>

<https://xdilab.com>

(A) CONTACT INFORMATION

Department of Computer Science, North Carolina Agricultural and Technical State University, MERIC Bldg., 1101 E Market St., Greensboro, NC 27401, hmoradi@ncat.edu, Tel: (+1) 210-374-0209

(B) EDUCATION

The University of Texas at San Antonio – Ph.D., Computer Science	Dec. 2020
The University of Texas at San Antonio – M.Sc., Computer Science	Dec. 2019
Payamenoor University, Tehran North – M.Sc., Software Engineering	Jul. 2012
Islamic Azad University, Tehran North – B.Sc., Software Engineering	Jul. 2010

(C) PROFESSIONAL EXPERIENCE

North Carolina Agricultural and Technical State University – Greensboro, NC, USA	
– Assistant Professor, Department of Computer Science	Aug. 2023 - Present
– Explainable Deep Intelligence (XDI) Lab Director (http://xdilab.com)	
The University of Mississippi – Medical Center – Jackson, MS, USA	
– Assistant Professor, Department of Data Science	Jan. 2021 – Aug. 2023
– Explainable Deep Intelligence (XDI) Lab Director	
The University of Texas - San Antonio – San Antonio, TX, USA	
– Research Assistant, Cloud Computing & Machine Learning	Aug. 2016 – Dec. 2020
– Instructor, Database Systems (<i>MySQL</i>)	May 2020 – Dec. 2020
– Instructor, Computer Programming with Eng. Application (C)	Aug. 2019 - May 2020
– Instructor, Programming I for Computer Scientists (<i>Java</i>)	Aug. 2018 - May 2019
Chalak Rayaneh Tehran, IT service provider and consultancy	Jul. 2010 - Aug. 2016
– Co-founder, Network Infrastructure and Security Engineer	

(D) AWARDS

- Mississippi Center for Clinical and Translational Research Pilot Project Proposal Award, 2023
- Outstanding Achievement in Teaching Award, the University of Texas at San Antonio, 2020
- Quality Matters (QM) Course Development Award, the University of Texas at San Antonio, 2020
- Graduate students' Competitive Scholarship Award, the University of Texas at San Antonio, 2020
- Outstanding Achievement in Research Award, the University of Texas at San Antonio, 2019
- MITRE GenAI Travel Award, the University of Texas at San Antonio, 2019
- National Science Foundation Travel Award, PerCom 2017

(E) PUBLICATIONS

- Littlefield, N., Plate, J., Weiss, K., Lohse, I., Chhabra, A., Siddiqui, I., Menezes, Z., Mastorako, G., Amirian, S., **Moradi, H.**, Tafti, A., “AI Fairness in Hip Bony Anatomy Segmentation: Mitigating Gender, Ethnicity, and Racial Bias in Plain Radiography Analysis” *IEEE Int'l Workshop on Ethics and Bias of Artificial Intelligence in Clinical Applications (EBAIC)*, 2023.
- Littlefield, N., **Moradi, H.**, Amirian, S., Plate, J., Tafti, A., “Enforcing Explainable Deep Few-Shot Learning to Analyze Plain Knee Radiographs: Data from the Osteoarthritis Initiative” *IEEE Int'l Conf. on Healthcare Informatics (ICHI)*, 2023.
- **Moradi, H.**, Bunnell, H., Price, B., Khodaverdi, M., Santangelo, S., Anzalone, A., Kimble, W., Porterfield, J., Vest, M., Hodder, S., “Treatment effects on SARS-CoV-2 infected patients: A big data approach” *PLOS ONE*, 2023.
- Lee, D., **Moradi, H.** “Knowledge-Infused Dynamic Embedding for Predicting the Severity of Suicidal Ideation in Social Media.” *Int'l Conf. on Computational Science and Computational Intelligence (CSCI)*, 2022.
- **Moradi, H.**, Wang, W., and Zhu, D. “Online Performance Modeling and Prediction for Single-VM Applications in Multi-Tenant Clouds.” *IEEE Transactions on Cloud Computing (TCC)*, 2021.
- **Moradi, H.**, Wang, W., and Zhu, D. “DiHi: Distributed and Hierarchical Performance Modeling of Multi-VM Cloud Running Applications” *Proceedings of IEEE International Conference on High Performance Computing and Communications (HPCC)*, 2020.
- **Moradi, H.**, Wang, W., Fernandez, A., and Zhu, D. “uPredict: A User-Level Profiler-Based Predictive Framework for Single VM Applications in Multi-Tenant Clouds.” *Proceedings of IEEE International Conference on Cloud Engineering (IC2E)*, 2020.
- Begam, R.*, **Moradi, H.***, Wang, W., and Zhu, D. “Flexible VM Provisioning for Time-Sensitive Applications with Multiple Execution Options.” *Proceedings of IEEE International Conference on Cloud Computing (CLOUD)*, 2018. *Equal contribution.
- Ghafari, M., **Moradi, H.** “A Framework for Classifying and Comparing Source Code Recommendation Systems.” *Proceedings of IEEE International Conference on Software Analysis, Evolution and Reengineering (SANER)*, 2017.

(F) SYNERGISTIC ACTIVITIES

- Interdisciplinary Research Collaboration: Collaborated with researchers from different disciplines, such as medical sciences, to apply deep learning techniques in healthcare applications. Resulted in three grants from NIH/NIGMS as co-investigator, and one grant as PI.
- Service to the Engineering Community: Served as a reviewer for more than seven prestigious journals and conferences in the fields of computer science and artificial intelligence, including IEEE Transactions on Cloud Computing (CLOUD), American Medical Informatics Association (AMIA), Journal of Supercomputing (SUPE), Transactions on Parallel and Distributed Systems (TPDS), Elsevier Sustainable Cities and Society (SCS).
- Community Outreach: Engaged and awarded in outreach activities that promote computer science and AI in the local community (MITRE GenAI, OSCT Marquette University)
- Teaching Enhancement: Engaged and awarded for active development of interactive materials and sharing of best practices to enhance the quality of higher education (Quality Matters [QM], University of Texas -SA)