Shovon Niverd Pereira

PhD Candidate in Computer Science & Engineering

- niverdpereira@gmail.com
- GitHub
- Google Scholar

Professional Summary

PhD candidate in Computer Science at UT Arlington with over 2 years of industry experience as a Senior Software Engineer at Samsung R&D Institute. Research focuses on explainable AI and surrogate models for machine learning, while actively contributing to academia as a Graduate Teaching Assistant across multiple courses from Object-Oriented Software Engineering to Machine Learning. Strong background in Android development, machine learning, and academic research with published work in blockchain applications and land management systems.

Education

Ph.D. in Computer Science and Engineering

The University of Texas at Arlington | 2022 - Ongoing

- Software Engineering Research Center
- GPA: 3.7/4.0
- Focus: Explainable AI, Surrogate Models, Machine Learning

Courses Completed:

- Data Structures & Algorithms
- Distributed Systems
- · Data Analysis & Modelling
- · Machine Learning
- Compilers
- · Advanced Software Engineering
- Computational Models & Algorithms

PhD Progress:

Z Diagnostic Evaluation (Fall 2023)

- ✓ Comprehensive Exam (Fall 2024)
- ✓ Coursework (Spring 2025)
- Dissertation Proposal (In Progress)

Bachelor of Science in Computer Science and Engineering

Military Institute of Science and Technology | 2016 - 2019

• GPA: 3.37/4.0

Professional Experience

Senior Software Engineer

Samsung Research and Development Institute | February 2020 - July 2022

- Developed Samsung Account application as part of Android Application team
- · Led development of terms & conditions, remote sign-in, and profile status modules
- · Worked on sign-out, API, and app architecture modules
- Participated in research team to minimize resource usage of Samsung Account in low-end devices
- Samsung Account is used globally as the principal account and ecosystem manager for Samsung devices
- Technologies: Android, Kotlin

Graduate Teaching Assistant

Department of Computer Science and Engineering, UT Arlington | September 2022 - Present

- Prepare course material and exams for bachelor and masters level students
- Grade quizzes and final exams for multiple courses
- · Deliver lectures on behalf of course instructor when required
- Guide and evaluate students on various projects
- Courses: Object-oriented Software Engineering, Distributed Systems, Machine Learning, Assembly Language

Graduate Research Assistant

Dean's Office, UT Arlington | Summer 2024

- Conducted research projects under the Dean's office supervision
- · Assisted with academic administrative tasks and initiatives
- Collaborated on institutional research and development projects
- Supported various academic programs and strategic planning activities
- Focus Areas: Research, Academic Administration

Research Experience

Current Research: Constructing Good Surrogate Models for Machine Learning UT Arlington | 2022 - Present

- Investigating surrogate models for improving transparency in black-box machine learning systems
- Developing interpretable models that approximate complex black-box system behavior
- Exploring applications in adversarial attack analysis and model explainability
- Focus areas: Healthcare and finance domain applications where transparency is critical

Publications

1. Blockchain-based digital record-keeping in land administration system

S Niverd Pereira, N Tasnim, R Sunny Rizon, M Nazrul Islam

Proceedings of International Joint Conference on Advances in Computational

Intelligence: IJCACI, 2021

View Publication

2. Multi-channel Approach Towards Digitizing the Land Management System of Bangladesh

Shovon Niverd Pereira, Noshin Tasnim, M Shahir Rahman, Sanjida Nasreen Tumpa, Md Mahboob Karim, Rabius Sunny Rizon, Nabila Shahnaz Khan, Ruhul Ambia Remon 2018 IEEE International WIE Conference on Electrical and Computer Engineering, 2018 View Publication

Awards & Recognition

- STEM Graduate Fellowship (Federal) UT Arlington (2022-Present) Federal fellowship supporting graduate studies in STEM fields
- Dean's Graduate Research Assistant UT Arlington (Summer 2024)
 Prestigious research assistantship for outstanding academic performance
- Travel Grant to 13th Summer School on Formal Techniques Stanford Research Institute (2024)

Competitive grant for advanced summer school on formal methods. I met and learned from world renowned computer scientists. It was funded by Stanford Research Institute affiliated with Stanford University. Only a few selected individuals worldwide get the opportunity every year.

- ICPC Asia Dhaka Regional Programming Contest Qualifier (2018)

 Demonstrated exceptional competitive programming skills
- Inter Department Debate Champion Military Institute of Science and Technology (2019)

Champion in inter-departmental debate competition

Leadership Experience

General Secretary

Bangladesh Student Organization at UTA | 2025-2026

- · Leading organizational activities and coordinating student events
- Managing administrative responsibilities and member communications
- · Organizing cultural and social programs for the Bangladeshi student community
- Facilitating collaboration between different student groups at UTA

Joint Sports Secretary

Bangladesh Student Organization at UTA | 2023-2024

- Organized and coordinated sports events and tournaments
- Managed team registrations and sports equipment logistics
- · Promoted physical fitness and recreational activities among students

President

MIST Computer Club, Military Institute of Science and Technology | 2019

- Led computer club with focus on programming and technology education
- Organized coding competitions and technical workshops
- · Mentored junior students in programming and software development
- Established partnerships with tech companies for student training programs

Technical Skills

Programming Languages: Kotlin, Java, Python, C++

Mobile Development: Android Development, Android SDK

Machine Learning: Surrogate Models, Explainable Al, Model Interpretability

Blockchain: Ethereum, Smart Contracts

Research Areas: Explainable Al, Adversarial Machine Learning, Software Engineering

Teaching: Course Development, Curriculum Design, Student Mentoring

Research Interests

- Explainable Artificial Intelligence (XAI)
- Surrogate Models for Black-box Systems
- Machine Learning Interpretability
- Adversarial Machine Learning
- Software Engineering for AI Systems
- Blockchain Applications
- Land Management Systems

Professional Memberships & Activities

- PhD Student Researcher at Software Engineering Research Center, UT Arlington
- Member of Bangladesh Student Organization at UTA
- Former President of MIST Computer Club

References available upon request