

# TANVIR AHMED KHAN

txk6771@mavs.uta.edu | +1 682-298-4085 | linkedin.com/in/tanvirtonoy/

## Education

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### University of Texas at Arlington

Jan 2021 - Present

Ph.D. in Computer Science

CGPA: 3.857

- Focus: Big data, Machine learning, Software Engineering

### University of Dhaka

Jan 2013 - Nov 2017

B.Sc. in Electrical and Electronic Engineering

CGPA: 3.10

## Research Interests

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- **Big Data:** Distributed Computing, Parallel Processing, Data Stream Processing, Query Processing and Optimization, Cloud Computing
  - **Machine Learning:** Distributed Machine Learning and Optimization

## Publications

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- *Translation of Array-based Loop Programs to Optimized SQL-based Distributed Programs*

M.H. Noor, L. Fegaras, **T.A. Khan**, T. Sultana

Open Journal of Big Data (OJBD) 2022.

- *AlloyFL: A Fault Localization Framework for Alloy*

**T.A. Khan**, A. Sullivan, K. Wang

The ACM Joint European Software Engineering Conference and Symposium on the Foundations of Software Engineering (ESEC/FSE) Demonstration Track (FSE Demo) August 2021.

## Skills

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Languages: C/C++, Python, JavaScript, TypeScript, C#, Java, Scala

Technologies: Apache Spark, Hadoop, TensorFlow, PyTorch, Angular, React, .NET, Tizen, Android, Play, MySQL, MSSQL, Bash, Git

## Professional Experience

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### University of Texas System

Austin, Texas, USA

**Software Developer Intern** – Texas Medical & Dental Schools Application Services May 2022 – Aug 2022

- Worked on TMDSAS portal to upgrade it using latest backend and frontend frameworks
- Created a .NET Web API in the backend keeping the existing database and React in the frontend
- Made the API secure using JSON Web Tokens (JWT)
- Using React and Material-UI in frontend, user experience was vastly improved

### Samsung R&D Institute Bangladesh

Dhaka, Bangladesh

**Software Engineer** – Moblie Application Group 2

Nov 2018 – Dec 2020

- Built UI components in Tizen Wearable framework for Samsung Galaxy smart watches

- Maintained and upgraded large code base of Samsung Wearable device apps
- Designed UI scrolling of Weather app to be 30% faster
- Designed and integrated SmartThings app with new API

#### **Software Engineer Intern**

Aug 2018 – Nov 2018

#### **Ixora Solution Ltd.**

##### **Software Developer**

Dhaka, Bangladesh

Mar 2018 – July 2018

- Designed and built a web application for blast (Bangladesh Legal Aid and Services Trust) to be used by people with disabilities to file cases, link: <https://blast-cms.org>
- Implemented a web application for managing product deliveries and logistic operations of courier services

#### **Software Developer Intern**

Nov 2017 – Feb 2018

### **Teaching Experience**

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#### **Aspire Teaching Fellowship**

Jan 2022 – Apr 2022

University of Texas at Arlington and Tarrant Community College

- Observed classroom practices, evidence-based teaching, and learning-through-diversity components at a Community College level
- Practiced setting learning goals for classes, creating assessment
- Taught classes using different teaching practices and student activities

#### **Graduate Teaching Assistant**

Jan 2021 – Present

University of Texas at Arlington

- CSE 6331: Cloud Computing
- CSE 5335: Web Data Management
- CSE 2315: Discrete Structures
- CSE 1205/2100: Practical Computer Hardware & Software Systems

### **Certifications**

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- SWC Professional Certificate – Samsung R&D Institute Bangladesh
  - ITEE FE level-2 – IPA: Information-technology Promotion Agency, Japan

### **Interests**

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- Chess, Soccer, Travelling, Photography, Food