Sahan Ahmad

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Education and Professional Preparation

Assistant Professor   Aug. 2023–present
Texas A&M University, San Antonio, TX USA
Department of Accounting and Finance
College of Business

External Advisor   Jun. 2023–present
University of Louisiana at Lafayette, Lafayette, LA USA
Deep Learning and Data Analysis Lab

Ph.D in Computer Science   Jan. 2018–May 2023
University of Louisiana at Lafayette, Lafayette, LA USA
Ph.D Advisor: **Prof. Aminul Islam**

M.Sc. in Computer Science   Jan. 2018–May 2020
University of Louisiana at Lafayette, Lafayette, LA USA

Software Engineer   Sept. 2015–Dec. 2017
BJIT Ltd, Dhaka, Bangladesh

Software Engineer   Sept. 2014–Aug. 2015
Apsis Solutions Ltd, Dhaka, Bangladesh

B.Sc. in Computer Science   Mar. 2010–July 2014
Khulna University of Engineering and Technology, Khulna, Bangladesh

Academic Appointments

Graduate Teaching Assistant   Aug. 2020–May 2023
Center for Advanced Computer Studies
University of Louisiana at Lafayette, Lafayette, LA, USA

Graduate Research Assistant   Jan 2018–July 2020
Center for Advanced Computer Studies
University of Louisiana at Lafayette, Lafayette, LA, USA

Research Interests

Artificial Intelligence, machine learning, deep learning, data Analysis, data science, data visualization, computer vision

Research Grants

Improving the Traning Time and Learning Capacity of a Deep Learning Model (Board of Regents Support Fund, Louisiana)

I helped my professor to write a proposal (**084A-23**) to the Board of Regents, Louisiana. It is a research competitiveness subprogram (RCS FY 2022-23), and the proposal is based on the first part of my dissertation (**Optimization and Adaptive Kernel Design for Convolutional Neural Network**). It achieves rank one in the Computer and information science section. The total grant is **149,351$** for three years.

Publications

Under Review

1. **[Nature'23] Sahan Ahmad**, Gabriel Trahan, Aminul Islam, "When do Convolutional Neural Networks Stop Learning?," Nature Machine Intelligence, 2023.

2. **[IJCV'23] Sahan Ahmad**, Gabriel Trahan, Aminul Islam, "Adaptive Kernel Selection for Convolutional Neural Network," International Journal of Computer Vision, 2023.

Published

1. **[HPCC'19] Sahan Ahmad**, SM Zobaed, R Gottumukkala, MA Salehi, "Edge Computing for User-Centric Secure Search on Cloud-Based Encrypted Big Data," International Conference on High Performance Computing and Communications, 2019.

2. **[NSysS'15] Sahan Ahmad**, Kazi Md Rokibul Alam, Habibur Rahman, Shinsuke Tamura, "A comparison between symmetric and asymmetric key encryption algorithm based decryption mixnets," International Conference on Networking Systems and Security , 2015.

3. **[HPCC'19]** SM Zobaed, **Sahan Ahmad**, R Gottumukkala, MA Salehi, "Clustcrypt: Privacy-preserving clustering of unstructured big data in the cloud," International Conference on High Performance Computing and Communications, 2019.

Student Supervision

Ph.D. Students:

- Gabriel Trahan (Fall 2024)

M.Sc. Students:

- Gabriel Trahan (Fall 2023)
- Raymond C Iloegbunam (Fall 2023)
- Clinton U Akalazu (Fall 2023)

Undergraduate Students

- Mark Alleman (Fall 2023)
- Nicholas A Russell (Fall 2023)
- Austin J Dugas (Fall 2023)
- Jennifer Broxson (Fall 2023)
- Amy Canelas (Fall 2023)
- Alexandre Davis (Fall 2023)
- Rodney E Harris (Fall 2023)
- Ruby Shrestha (Spring 2022)
- Brian R Hodge (Spring 2022)
- Matthew J Slaughter (Spring 2022)
- Devin Rogers (Spring 2022)
- Austin T Jones (Spring 2022)
- Ryan M Hebert (Spring 2022)
- Alexander M Gore (Spring 2022)
- Steven G Chesne (Spring 2022)

- Matthew S Arroyo (Spring 2022)

Software Engineering Experience   Aug. 2014–Dec. 2017

- BJIT Ltd, Dhaka, Bangladesh   Sept. 2015–Dec. 2017
  - SolidWorks and Aton EPDM Application Management System, Valmet, Finland
    * Improved the system availability time around 33% of the application, performed database and system administration role
    * Managed a team of 5 software engineers for one year in the SolidWorks EPDM project at BJIT
  - Aton Continues Development System, Valmet, Finland
    * Built reporting service module for the integrated Product Data Management (PDM) system
    * Experienced in working with the business and technical team and demonstrated technical contribution to stakeholder
    * Professionally trained in Valmet Corporation (Finland branch) for two months in data management and analytics
- Apsis Solutions Ltd, Dhaka, Bangladesh   Sept. 2014–Aug. 2015
  - Used Crystal report to interface with data miners and analysts to extract, transform and load data from a wide variety of data sources using SQL

Professional Activities

- ***Conference Reviewers:*** International Conference on Computational Linguistics, Canadian Conference on Artificial Intelligence.
- ***Journal Reviewers:*** The Journal of Supercomputing.

Awards

Academic Honors Convocation from University of Louisiana at Lafayette