TONNI DAS JUI

Ph.D Student

@ tonnijuicse@gmail@gmail.com ☎ +1 254-424-7912 ● Waco, TX, USA 🌐 tonnidas.github.io
linkedin.com/in/tonnijui github.com/tonnidas

I am pursuing PhD at Baylor University in Computer Science with R&D expertise in Python, Pytorch, Tensorflow, Java, and Spring Boot.

EXPERIENCE

Graduate Research Assistant
Baylor Cloudhubs Lab

📅 January 2021 – Present ● Waco, TX, USA

Uses: Python, TensorFlow, PyTorch, ScikitLearn

- **Graph machine learning:** Implemented graph embedding with autoencoder and regularized adversarial model for n-hop neighbors to achieve a 10% improvement in link prediction, clustering, and attribute prediction accuracy.
- **Quantum machine learning:** Implemented quantum classifiers with quantum kernels to achieve similar accuracy on convergence for separable and non-separable datasets as traditional approaches.
- **Sign language analysis with machine learning:** Implemented a 3D multistage temporal convolutional network to achieve similar accuracy as Lexicostatistics for finding similarity rates between ASL, BSL, ISL, and Auslan.
- **AI ethics:** Implemented a mapping study method on thirty papers from IEEE, ACM, ScienceDirect, etc. to find out state-of-the-art research questions, solutions, and future direction and collected them on a literature review paper.

Lecturer
Leading University

📅 January 2019 – January 2021 ● Sylhet, Bangladesh

Used: Java, OOP, Data Structures, Design Patterns

- **Object Oriented Programming:** Taught students core concepts of object-oriented programming such as Inheritance, Encapsulation, Abstraction, and Polymorphism using Java Programming language, object-oriented analysis, and design, etc.
- **Android application development:** Supervised multiple teams of undergraduate students to develop interactive android-based applications using Java backend and HTML5 for frontend.

EDUCATION

Ph.D. in Computer Science
Baylor University

📅 Jan 2021 – Present ● Waco, TX, USA 🎓 CGPA 3.70

B.Sc. in Computer Science and Engineering
Brac University

📅 May 2014 – May 2018 ● Dhaka, Bangladesh 🎓 CGPA 3.76

ACCOMPLISHMENTS

- Solved total of 135 **LeetCode** problems.
- Published 2 article on SL similarity analysis with machine learning and Quantum machine learning.

SKILLS

Java Python Spring Boot Hugo
TensorFlow Pytorch PySpark Git
Postgres MySQL MongoDB neo4j

PROJECTS

Bear Go
🔗 https://github.com/tonnidas/beargo

- Identified the use cases and designed the UML diagrams.
- Designed the REST APIs, developed the backend, implemented unit, and integration tests, and deployed the application in production.
- Used: Spring Boot, REST API, React, JPA Repository, OAuth2 authentication, UML

Hall of Fame Generator
🔗 https://github.com/tonnidas/HallOfFame

- Measuring similarity scores of players of the same type in different technologies developed as a Cloud Computing project.
- Applied Bill James' concept for comparing two players' scores using the distance function.
- Used: pySpark (RDD, Python), Dask (Python, Dask Bag), MongoDB (file system, MongoDB Query Language (MQL)).

Contest Registration Service
🔗 https://github.com/tonnidas/Contesting

- A platform for various teams to register for programming contests maintaining constraints by the contest organizers.
- Identified use cases and entity relationships.
- Designed the REST APIs, developed the backend and implemented unit and integration tests.
- Used: Spring Boot, REST API, Hibernate

Car Tuning Service
🔗 https://github.com/tonnidas/CarTuning

- A platform for ordering car parts services online implementing JM and Kafka message system.
- Used: Spring Boot, REST API, JMS, Kafka, Angular