# Raiyan Ahmed

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## Summary

I have studied computer science and engineering at the Islamic University of Technology. My thesis was on the development of a prototype-based detection system that employs Machine Learning algorithms to recognize violence in video data. I have worked for Last Call Media for almost two years as a Software Engineer.

## Work Experience

## Last Call Media (Talentedcube)

Remote

Software Engineer

July 2021 - present

Talentedcube was the name of the Bangladeshi remote team that I was a member of. I was responsible for contributing to the projects of Last Call Media and the TalentedCube initiatives. I had the opportunity to work on some of their client projects.

- Protrain: This is a health training platform where professionals charge you for guiding your exercises. This is aimed to be a substitute for physical gyms. I have actively worked in building the front end and the back end. Technologies used: NextJs, Cypress, Jest, Github, Jira, and Vercel. Click here to view the prototype.
- Broadcast: This helps our client to view and approve the time logs in Harvest. I have actively worked on building cron jobs and different APIs. Technologies used: NextJs, Cypress, Jest, Github, Jira, and Vercel. Click here to view the live preview.
- CubeBurst: This website can host any NextJs website through them. I have actively worked on building the front end and back end. Technologies used: NextJs, NestJs, AWS, Cypress, Jest, Github, and Jira. Click here to view the prototype.
- **Seramount:** This website was built for the client to promote their organization. Technologies used: WordPress, PHP, Lando, and Github. Click here to view the live preview.

Data-Edge Software Engineer Intern Dhaka, Bangladesh

November 2019 - December 2019

During this 2 months internship, I have been assigned to work under a supervisor. My prime roles were to get familiar with Asp .Net framework and test their applications. Finally, I had to come up with a proposed solution.

## EDUCATION

#### B.Sc. in Computer Science and Engineering

2017-2021

Islamic University of Technology

CGPA: 3.52 out of 4

Thesis: Efficient Two-Stream Network for Violence Detection Using Separable Convolutional LSTM

#### **Higher Secondary School Certificate**

2016

St. Joseph Higher Secondary School and College

GPA: 5 out of 5

## Secondary School Certificate

2014

St. Joseph Higher Secondary School and College

GPA: 5 out of 5

## Research Experiences

## Researcher, Computer Vision Lab (CVLab)

Islamic University of Technology (IUT), Bangladesh

- Area of work: Violence detection from video footage
- Published paper in 2021 International Joint Conference on Neural Networks (IJCNN)
- The paper has 16 citations. Click here to read the full paper

#### **PUBLICATIONS**

"Efficient Two-Stream Network for Violence Detection Using Separable Convolutional LSTM" (July 2021). In: 2021 International Joint Conference on Neural Networks (IJCNN). DOI: 10.1109/IJCNN52387. 2021.9534280.

# PROJECTS

Violence detection Link to Github

- CNN and sepConvLstm are used to extract features that are passed to the classifier
- Achieved 89.75 percent accuracy

## Cat and dog detection

Link to Github

- Applied a deep neural network for supervised learning
- Achieved 80 percent accuracy

SwiftEats Link to Github

- A website for promoting the restaurant. Provides all information to the customers about the restaurant
- Used React and Redux Live Previw

#### Product Management System

Link to Github

- Complete solution for inventory management using Laravel framework with mysql
- It can view, add, edit and delete products by logging in, also filter by price and search products by keyword. Live Previw

## Virtual Classroom - Database Project

Link to Github

- The complete database management system for classwork
- Provided interface using Java

#### Phonebook System - Desktop Application

Link to Github

- A total management system for contacts
- Developed in CodeBlocks using C++

Dec 2022

## Battleship - Console Application

- A minesweeper-type game
- Developed in CodeBlocks using C++

## SKILLS

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

Web Development: Html, CSS, Javascript, ReactJs, NextJs, NestJs, NodeJs

Database: SQLite, MySQL, Oracle, MongoDB

Testing: Cypress, Jest

Machine Learning: TensorFlow, OpenCV, Pandas

Others: Github, Jira, Matlab, AutoCad, Blender, AWS, etc

# STANDARDIZED TEST SCORES

## International English Language Testing System (IELTS)

Overall: 7.0 out of 9.0 (Listening: 7.5, Reading: 7.5, Writing: 6.0, Speaking: 7.0)

## Extra-Curricular Activities

- Programming Contestant (2017-2019), IUT ICT Fest IUT Computer Society, Islamic University of Technology, Bangladesh
- Organizer (2017-2019), IUT ICT Fest IUT Computer Society, Islamic University of Technology, Bangladesh
- Volunteer (2014-2015), Scintilla Science Festival St. Joseph Higher Secondary School and College
- Striker, Josephite Football Team

St. Joseph Higher Secondary School and College

• Participant (2006-2013), Scintilla Science Fair

Winner in 2013

St. Joseph Higher Secondary School and College

## References

#### Dr. Md. Hasanul Kabir

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#### Dr. Hasan Mahmud

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