**Curriculum Vitae**
**PRAMIT DUTTA**

Email: pdutta@uoguelph.ca
Website: Portfolio
Google Scholar: Scholar ID
LinkedIn: LinkedIn Profile
ResearchGate: My Account
Github: My Profile

## Academic Credentials

**Master of Applied Science in Computer Engineering Candidate**

Affiliation with CSAI (Collaborative Specialization in Artificial Intelligence)

School of Engineering, University of Guelph

Guelph, Ontario, Canada September 2024- Present

**Bachelor of Science (Engineering)**

Department of Electronics and Telecommunication Engineering

CGPA:3.81/4.00

Chittagong University of Engineering & Technology (CUET)

Chittagong, Bangladesh January, 2018- March, 2023

## Work Experience

**Graduate Research Assistant**
AI Enabled Medical Imaging Lab
University of Guelph September 2024- Present
**Description:** The AI-Enabled Medical Imaging Lab focuses on advancing health care solutions through AI-driven approaches. As a Graduate Research Assistant, I am developing and optimizing artificial intelligence models for multimodal learning, with an emphasis on creating innovative solutions for medical image analysis and improving patient care outcomes.

**Graduate Teaching Assistant**
ENGG*3390- Signal Processing
University of Guelph September 2024- December 2024
**Description:** As a Graduate Teaching Assistant in Signal Processing (Fall 2024), I was responsible for conducting laboratory sessions to help students grasp the fundamental concepts in signal processing. My role also involved grading assignments and invigilating exams. Additionally, I collaborated with the course instructor and fellow GTAs to design practical lab exercises that aligned with the course objectives.

## Technical Skills

**Programming Language:** C, Java, Python (TensorFlow), MATLAB, LaTex

**Engineering Software:** Simulink, Fuzzy Logic Toolbox

## Projects

**1. Automatic Egg Incubator Using Mamdani Fuzzy Inference System** **Check It Out**

- Optimizing Temperature and Humidity using Fuzzy Inference System

**2. Communication System Prototype** **Check It Out**

- Communication system prototype implemented in MATLAB Simulink

**3. Stock Price Prediction** **Check It Out**

-Designed a RNN model to predict upward or downward trend of Google Stock Price

**4. Brain Tumour Classification Using Transfer Learning** **Check It Out**

- A model to classify different types of brain tumour into their particular types using transfer learning model Inception V3.

## Research Experience

**Publication:**

| Sl. No | Title | URL |
|---|---|---|
| 01. | Conv-ViT: A Convolution and Vision Transformer based Hybrid Feature Extraction Method to Detect Retinal Disease Detection | [Check Out The Paper] |
| 02. | Identifying Counterfeit Products using Blockchain Technology in Supply Chain System | [Check Out The Paper] |
| 03. | COVID-19 Detection using Transfer Learning with Convolutional Neural Network | [Check Out The Paper] |
| 04. | Optimization of Temperature and Relative Humidity in an Automatic Egg Incubator Using Mamdani Fuzzy Inference System | [Check Out The Paper] |
| 05. | Multi-Classification of Brain Tumour Images Using Transfer Learning Based Deep Neural Network | [Check Out The Paper] |

**Undergraduate Thesis:**

**Title:** Conv-ViT: A Convolution and Vision Transformer based Hybrid Feature Extraction Method to Detect Retinal Disease Detection [Thesis] [Publication]

**Description:** A triple stream feature extractor which fuse the feature extracted by Inception V3, ResNet-50 and Vision Transformer.

**Supervisor:** Dr. Md. Azad Hossain

## Certification

1. Machine Learning an online non-credit course authorized by Stanford University and offered through Coursera **[External Link]**
2. DeepLearning.AI TensorFlow Developer Professional Certificate **[External Link]**
3. TensorFlow Advance Techniques Specialization Certificate authorized by DeepLearning.AI and offered through Coursera **[External Link]**
4. AI For Medicine Specialization Certificate authorized by DeepLearning.AI and offered through Coursera **[External Link]**
5. Internet of Things provided by Planeter Ltd. **[External Link]**

## References

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