

MD HEDAYETUL ISLAM CHY

+8801829353906 ◇ Chandgaon, Chittagong, Bangladesh

Email: islamhedayet67@gmail.com ◇ Webpage: hedayet13.github.io

I am an electrical engineer with a specialization in embedded systems, bio-surface modeling, medical image processing and machine learning. Currently, I'm fully captivated in the fields of drug delivery and non-invasive medical technology, where I harness my expertise to drive innovation and make a positive impact.

EDUCATION

- **University of Chittagong,** Chittagong, Bangladesh
Masters of Science, Electrical & Electronic Engineering
CGPA: 3.58/4.00 (Expected) Ongoing
- **University of Chittagong** Chittagong, Bangladesh
Bachelor of Science, Electrical & Electronic Engineering
CGPA: 3.36/4.00 2017 - 2021

THESIS AND PROJECT

Design, Fabrication and Performance Analysis of Anti-splashing Surface Jan 2022 - Feb 2024

- Designed 3D printed surfaces to reduce fluid splashing and investigated simulations through Ansys Fluent.
- The Volume of Fluid (VoF) method was used for the optimization process.
- The finalized structured model is almost 69% more effective than the flat surface model.

Covid-19 ICU Monitoring Aug 2020 - Mar 2021

- A system that assists hospital personnel in real-time monitoring of patients' bedside displays from a non-covid space. Experienced how a project becomes a product.
- Developed a Python Wrapper for conducting image processing and character recognition algorithms.
- Esp-32 camera for capturing image and send using TCP/IP protocol.
- Devised an cross-platform application that maintain communication with server.

PUBLICATIONS

- **Md Hedayetul Islam Chy**, Riya Biswas, Md Fazlul Kader, Yuan Wan, Mohammed Arif Iftakher Mahmood,
"Design optimization of anti-splashing targets and simulation of droplet impact on it." - Physics of Fluids, 36(1).

AWARD AND TRAINING

- National ICT Fellowship, awarded by the Government of the People's Republic of Bangladesh, to support research in the field of bio-surface, 2022
- Former trainee, Ghorashal Training Center, Bangladesh Power Development Board, Palash, Narsingdi, 2021
- One of the top three team selected for National Hackathon 2019, Title: AI and ML recognized stereo camera for Occupational Health and Safety

TECHNICAL SKILLS

Electrical & Mechanical	PSpice, Proteus, Diptrace, Solidworks3D, Ansys Fluent
Coding	Python, MATLAB, Dart
Microcontrollers	Raspberry pi, Esp32-cam, TTGO camera plus, Arduino
ML/DL	Tensorflow, Keras, Scikit-Learn, Reinforcement Learning
Visualization	OpenCV, OriginPro, ParaView etc
Web server & OS	Flask, Django, UbuntuOS, KaliOS, Raspbian
Others	Flutter, Illustrator, Microsoft Azure services, Virtual machine, GCP, Docker etc.