

# 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 medical image analysis, robotics and biomedical engineering, where I harness my expertise to drive innovation and make a positive impact.

## ACADEMIC CREDENTIALS

<b>Master of Electrical and Electronic Engineering</b> , University of Chittagong	Expected 2023
<b>Bachelor of Electrical and Electronic Engineering</b> , University of Chittagong	2017 - 2021
<b>CGPA:</b> 3.36/4.00	

## WORK EXPERIENCE

<b>UprintBD</b> , R&D Engineer	July 2022 - present
<ul style="list-style-type: none"><li>Reconfigured printing devices and developed a mobile application alongside server for accelerating cloud printing services.</li></ul>	

## THESIS AND PROJECT

<b>Surface Engineering</b>	Nov 2021 - June 2023
<ul style="list-style-type: none"><li>Designed 3D printed surfaces to reduce fluid splashing and investigated simulations through Ansys Fluent.</li><li>Applying different CFD methods such as Volume of Fluid, Eulerian method etc.</li><li>Optimized various parameters and analyzed the structure with materials such as SLA-resin and PDMS.</li></ul>	

<b>Covid-19 ICU Monitoring</b>	Aug 2020 - Mar 2021
<ul style="list-style-type: none"><li>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.</li><li>Developed a Python Wrapper for conducting image processing and character recognition algorithms.</li><li>Esp-32 camera for capturing image and send using TCP/IP protocol.</li><li>Devised an cross-platform application that maintain communication with server.</li></ul>	

## PUBLICATIONS

- Design optimization of anti-splashing targets and simulation of droplet impact on it** (Under review)  
*Physics of Fluids - AIP Publishing LLC* 8 Sep,2023

## AWARD AND TRAINING

- ICT Division 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

<b>Electrical &amp; Mechanical</b>	PSpice, Proteus, Diptrace, Solidworks3D, Ansys Fluent
<b>Coding</b>	Python (comfortable), MATLAB, Javascript, dart
<b>Microcontrollers</b>	Raspberry pi, Esp32-cam, TTGO camera plus, Arduino
<b>Web server &amp; OS</b>	Flask, Django, Nodejs, UbuntuOS, KaliOS, Raspbian
<b>Data Visualization</b>	OriginPro, ParaView etc
<b>Others</b>	Flutter, Illustrator, Machine Learning, Deep Learning, Microsoft Azure services, Virtual machine, GCP, Docker etc.