

# DHIMAN ROY

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## EDUCATION

### ■ B.Sc. in Mechanical Engineering

Bangladesh University of Engineering and Technology

📍 Dhaka-1000, Bangladesh 📅 April, 2019

CGPA: 3.57 on the scale of 4

### ■ Higher Secondary Education in Science

Cantonment Public School And College

📍 Rangpur-5401, Bangladesh 📅 April, 2014

GPA: 5 on the scale of 5

### ■ Secondary Education in Science

Rangpur Zila School

📍 Rangpur-5400, Bangladesh 📅 February, 2012

GPA: 5 on the scale of 5

## RESEARCH INTEREST

- Microfluidics
- Nanofluidics
- CFD
- Rarefied Gas Dynamics

## PAPER ACCEPTED

### A Computational Analysis of Fluid Mixing Characteristics Inside a Microchannel by Pulsating Streams

16th Asian Congress of Fluid Mechanics

📍 JNCASR Bengaluru 📅 December, 2019

This work is done to analyze the use of pulsating streams for possible enhancement of fluid mixing in a microchannel at low Reynold numbers.

[https://doi.org/10.1007/978-981-15-5183-3\\_20](https://doi.org/10.1007/978-981-15-5183-3_20)

## PROJECTS

### ■ Wheelchair with smart control

- Changed over an ordinary wheelchair to a mechanized one with least expense
- For low income individuals with special needs
- GPS navigation and emergency alert system was included

### ■ Android project on emergency situation

- A very basic android application for one-click notification
- Developed this whole project using an open source web application

## EXPERIENCE

### ■ Research Experience

Macro-to-Micro scale Fluids Engineering Lab (M<sub>μ</sub>FEL)

📍 Dept. of ME, BUET 📅 November, 2020 - Present

- Working as a research assistant

### ■ Teaching Experience

Lecturer at Department of Mechanical Engineering in Sonargaon University (SU)

📍 147/I, Green Road, Dhaka-1215 📅 June, 2019 - Present

### ■ Industrial Experience

In Plant Trainee

📍 The ACME Laboratories Ltd. 📅 October, 2018

- Performed inspection of different subsystems and equipment
- Reported daily to the Chief of the Engineering Department

## STRENGTH

- Scientific Computational Tool: Matlab
- Programming Language: C, Python, Scheme
- FEM Modeling Tool: ANSYS
- Design Tool: AutoCAD, Solidworks
- Plotting and Graphics Tool: Tecplot, Inkscape
- OS: Windows, Linux (Ubuntu)

## EXTRACURRICULAR ACTIVITIES

### ■ Intra-Cantt. Math Olympiad

- 1<sup>st</sup> runner up team, 2013

### ■ Bangladesh Mathematical Olympiad

- Academic Team Member, 2016 - Present
- 1<sup>st</sup> runner up, Divisional round, 2012
- 2<sup>nd</sup> runner up, Divisional round, 2011

### ■ Bangladesh Astronomical Olympiad

- 2<sup>nd</sup>, Divisional round, 2011

## REFEREES

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