

# DHIMAN ROY

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📍 Mohakhali, Dhaka-1212, Bangladesh

## EDUCATION

■ **M.Sc. in Mechanical Engineering**  
Bangladesh University of Engineering and Technology

📍 Dhaka-1000, Bangladesh 📅 Ongoing

■ **B.Sc. in Mechanical Engineering**  
Bangladesh University of Engineering and Technology

📍 Dhaka-1000, Bangladesh 📅 April, 2019

■ **Higher Secondary Education in Science**  
Cantonment Public School And College

📍 Rangpur-5401, Bangladesh 📅 April, 2014

■ **Secondary Education in Science**  
Rangpur Zila School

📍 Rangpur-5400, Bangladesh 📅 February, 2012

## RESEARCH INTEREST

- Microfluidics
- Micropropulsion
- Turbulence
- Discrete Phase

## 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**

Department of Mechanical Engineering in Sonargaon University (SU)

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

- Working as a Lecturer

■ **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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