YOUR NAME

City, State

Phone No

Your Email Id

LinkedIn profile URL

**Carrier Objective**

To work in a field of science and technology that provide innovative solutions to complex engineering problems with the help of critical thinking and reasoning. Currently looking for an organization that work with core objectives of thermal engineering and focused on research.

**Academic**

**Nirma University** Ahmedabad, Gujarat

M.Tech (Thermal) Graduated May 2019

**CGI- 8.11**

**Mewar University** Gangarar, Rajasthan

B.Tech (Mechanical) Graduated June 2015

**CGPA- 7.32**

**Morning Star School** Ratlam, Madhya Pradesh

12th Graduated March 2011

**Percentage- 60.2**

**Morning Star School** Ratlam, Madhya Pradesh

10th Graduated March 2009

**Percentage- 61.5**

**Research Project**

**M.Tech Project**

**CFD analysis of Fluid flow in straight micro-channel to find the critical Reynolds number for transition during slip flow and turbulent flow region.**

A non-dimensional 2D model is simulated using ANSYS Fluent software by using Control Volume method for discretization. At No-Slip Flow Boundary condition the flow is simulated to find the Critical Reynolds number for transition from laminar to Turbulent flow, using turbulent model **LES(Large Eddy Simulation)**.

1. Developed a 2-D geometric model for the simulation.
2. Developed a mythology to solve the problem of finding critical Reynold number in channels
3. Three types of geometry was prepared using CAD software.
4. Fine and conformal meshing of geometry is done using ANSYS software.
5. Simulation of turbulent flow for critical Reynold number is done using ANSYS Software for various shape of geometry.

**Research Utility**

As the roughness from Semi-circle procced to rectangular shape turbulence increases in the channel.

Bifurcation is found in the mini-channel by drawing phase portrait and FFT of the instantaneous velocity component.

Critical Reynold number will help in find the zone of optimum pressure drop and size of roughness with in the channel for effective heat transfer

**Personal Projects**

**Project 1: CFD analysis of fluid flow over a Streamline body and bluff bodies:** Analysis of bluffand streamlined body with unsteady state flow is analysed for Reynolds number range of 30 to 100 and

the results of fluent software were compared with literature qualitatively. At low Reynolds number eddies are attached to the surface and initialization of flow separation occurs and as the Reynold number increases generation of Karman vortex is observe.

**Project 2: CFD Analysis of flow in sinusoidal wavy channel:** The objective of this CFD analysis wasto perform unsteady state, dimensionless flow analysis in the sinusoidal wavy channel of given Amplitude, wavelength and at certain Reynolds number using Ansys Fluent. The results produced indicated the formation of a vortex in the diverging section of the micro channel, variation in the flow properties like pressure and velocity are also analysed.

**Vocational Training/Internship**

1. **Ice Make Refrigeration Ltd (May 2018- July 2018)** Vocational Trainee

Evaporating and Condensing unit testing and assembling Insulation material processing (Foam) and handling.

Detail introduction on technical specification of various cooling machines such as deep freezers, cold rooms and chillers and ice-cream machinery.

1. **Nicomet Industries Ltd. (Jan 2015- June 2015)** Internship.

Minimized losses in the centrifugal pump which resulted in less power consumption.

Exposure to understand various machines and equipment’s.

Performing group tasks and job assigning.

**Certificates**

**C Programming (03/2018)**

Online test conducted by IIT Bombay

**Certificate of Excellence (2018)**

Centre for United Nation RIO+24 War and Peace- International decade for the Rapprochement of cultures IDRC India Program.

**Professional Skills**

|  |  |
| --- | --- |
| Simulation software (ANSYS fluent) | Competent |
| CAD software (Solid Works) | Intermediate |
| C coding for numerical solutions | Beginner |
| MS Office | Competent |

**Languages** Lang1, Lang2

**Hobbies & Interests** Volleyball, Swimming, Novels, News reading