

# Sidharth Sindhra

<https://schrodinger1926.github.io>  
sidharth.sindhra@gmail.com | +91 9464014141

## EDUCATION

### IIT KHARAGPUR

B.TECH + M.TECH (DUAL DEGREE)  
Metallurgical and Materials Eng  
2012-2017 | Kharagpur, India

### UDACITY

SELF-DRIVING CAR NANODEGREE  
Computer vision & Deep learning  
Nov 2017 - Present

## LINKS

Github:// [schrodinger](#)  
LinkedIn:// [Sidharth Sindhra](#)  
facebook:// [sidharth.sindhra](#)  
Medium:// [sidharth.sindhra](#)

## COURSEWORK

### GRADUATE

Computational Neuroscience  
Genetic Algorithms  
Data structure and algorithms  
Natural Language Processing

### UNDERGRADUATE

Basic Electronics  
Programming and Data Structure  
Probability and Stochastics  
Partial Differential Equations

### MOOCS

Algorithms I and II  
Machine Learning  
Computer vision  
Deep learning  
Web Development in python

## SKILLS

### PROGRAMMING

Over 5000 lines:  
Python • Matlab  
Over 1000 lines:  
C++ • lua • Javascript  
Familiar:  
LaTeX • Android • CUDA • MySQL

### TOOLS

Platforms & Libraries  
AWS • Google App Engine • Git  
TensorFlow • torch • sklearn • NLTK

## EXPERIENCE

### MARTIAN LABS | SOFTWARE INTEGRATION LEAD

Dec 2016 – Sept 2017 | IIT Kharagpur & Chandigarh  
Marian Labs is a project deeply inspired from MIT Media Labs OpenAg Initiative where we built a controlled environment simulator for growing leafy green vegetables, not meant to be grown in ambient environment. Published project summary article, viewed 566 times till date.

–"I'm just too damn proud of you!", Prof. N.Chakraborti | IIT Kharagpur

–"Amazing", Ashris Choudhary | MIT Media Labs

### SURUKAM ANALYTICS | RESEARCH INTERN

May 2015 – July 2015 | Chennai, India

- 3 out of 250 applicants chosen for the position.
- A Microsoft accelerator startup working in automating legal work flows.
- Responsible for developing the Text Classification Engine using Temporal Convolutional Neural Network.

## PROJECTS

### AIMA | OPEN SOURCE CONTRIBUTOR

March 2016 – April 2016 | Kharagpur, WB

- AIMA is Python implementation of algorithms from Russell And Norvig's "Artificial Intelligence - A Modern Approach".
- Repository directly monitored by Peter Norvig (Director, Google Research)
- I contributed in chapters of machine learning and decision theory along with test suits.
- Wrote 400 lines of production quality code.

### EVOLUTIONARY ALGORITHMS BASED OPTIMIZATION

July 2015 – May 2017 | IIT Kharagpur

Used evolutionary Neural Network to solve the problem of under-fitting and overfitting neural networks on noisy blast furnace data. Found the optimal network architecture using prey-predator model after running for 150 generation. Increased accuracy by 21.2%

### SYNONYM GENERATION USING GOOGLE WORD2VEC

Dec 2015 – Jan 2016 | IIT Kharagpur

Trained first 1 Billion characters from Wikipedia as training set provided by google on Word2Vec Neural Net. Analyzed noise made by accompanying anto/hyper/hypo nyms. Conducted experiments by stacking WordNet to narrow search.

## AWARDS

2017	Winner	GES, Gupshup Hackathon
2015	top 20/1300	American Express, AnalyzeThis (Data Science)
2011	1st	Physics, CBSE XII Board, Radha Vatika
2011	top 3600/479651	IIT-JEE, 2012

## CONFERENCES & WORKSHOPS

2016	CyberEye	Kshitij, IIT Kharagpur
2017	PyCon	New Delhi, India