Hello  
I’m Sushovan Mandal, B.Tech student, Computer Sc. & Engg., IIT Kharagpur

**Contact No**.: **+91-9800397328**; **Email**: [**mandal.sushovan92@gmail.com**](mailto:mandal.sushovan92@gmail.com)

**Linkedin :**  [**in.linkedin.com/in/sushovanmandal**](https://in.linkedin.com/in/sushovanmandal) **; Github:** [**github.com/enlighter**](https://github.com/enlighter)

# Skills

**Python, C, C++ 11, Django Frameworks, Java, SQL**; prefer **Linux** environment & **terminal**; version control:-**git, github**; Integrated Development Environments:- **Eclipse, IntelliJ IDEA & derivatives, Microsoft Visual Studio**; advanced code editors:- **Sublime, Atom**; Any Office Suite; **Open-source libraries:-** Python packages, OpenCV, ROS.

# Experience

### National Digital Library, IIT Kharagpur *-* Project Student, B.Tech Project

## FEBRUARY 2015 - DECEMBER 2016

* **Designed and Developed** prototype sister *web portal* of National Digital Library, under MHRD India, for searching and accessing yesteryear Question Papers of Board Exams and Entrance Examinations, single-handedly
  + Used **Django Frameworks** and **MariaDB** database backend.
* Created **Python** program for **Information Retrieval** from educative content files for **automation** of metadata creation for indexing the files in the Digital Library
  + Used Open-source Python packages like lxml, ebooklib.
* **Automated** conversion of a large batch of metadata between formats.

### SAP Labs India, Bangalore *-* Intern

## MAY 2013 - JULY 2013

* Interned at **Testing Automation** Department, in collaboration with batchmate, with Proprietary software technologies
  + Developed **prototype Windows application** using *C# and Visual Studio* for integrating SAP tool with third-party software suite.
  + Developed prototype Android application **for testing mobile apps**.

### thelearningpoint.net, work from home *-* Freelancer

## JUNE 2012 - JULY 2012

* **Designed and developed** *interactive visual simulations* using [Processing](https://processing.org/) libraries and IDE, **proportional to real-time motion characteristics** for few basic mechanics topics including Simple Harmonic Motion, for e-learning purposes.

### Autonomous Ground Vehicle, IIT Kharagpur *-* Junior Developer

## AUGUST 2011 - MARCH 2013

* Acquainted myself with various **Artificial Intelligence** techniques like *A\* search*, worldview of robot by *Simultaneous Location and Mapping* (SLAM), *3D point cloud* mapping from *3D LIDAR*, *stereoscopic vision,* as member of **inter-disciplinary research & development team** in the field of **Robotics & Artificial Intelligence.**
* Contributed to *SONAR and GPS sensor modules* for **path-planning and obstacle avoidance** in Version 1 of bot, *Eklavya*, our team's entry to IGVC '12, Michigan, USA.
* Collaborated on **​simulating motion dynamics** using ​*Gazebo Robotics simulator* and *Robot Operating System* (ROS) for Version 2 of bot for participating in ​IGVC ‘13 and ​also for *Lunar Autonomous Rover* ​prototype chassis for ​*Team Indus*​, Google Lunar Xprize finalist.

### Intaglio 2012, IIM Calcutta *-* Contributor

## DECEMBER 2012 - DECEMBER 2012

* Collaborated with senior to build an online Business Simulation Game portal using *HTML, CSS and PHP*.

# Education

### Machine Learning Nanodegree *-* udacity.com

## FEBRUARY 2016 - expected AUGUST 2016

### Bachelor of Technology *-* Computer Science & Engineering, IIT Kharagpur

## Expected DECEMBER 2016

CGPA - 6.7 till last semester

### AISSCE 2010, CBSE 10+2 *-* DAV Model School, Durgapur

All India Senior School Certificate Examination, **Science with Computer Science** - 89%.

### AISSE 2008, CBSE 10 *-* DAV Public School, Midnapore

All India Senior School Examination, Board - 88.4%.

# Projects

### Academic Projects *-* IIT Kharagpur

* Built prototype *Online Course System* website using **Django** and **MariaDB**.
* Used **Hadoop and MapReduce** to **extract statistics** about user behaviour from online discussion forum data.
* Used **C++ 11** for **Computer Graphics** and **C** for **Operating System** Projects.

### Robocop, Robotix ‘11 *-* Kshitij’11. Techno-Management fest of IIT Kharagpur

* Won **Best Freshers’ Award** with 3 member team in Robotics Event implementing **Image Processing.**
* Used **OpenCV** libraries in *VC++ Visual Studio* Project, run on a laptop driving Differential Drive of the bot.

# Extra-curricular Activities

Awarded one of the **best volunteers** for the year at NSS in capacity of **Deputy Group Leader**.

Participated in IIT KGP’s various Technical and Social & Cultural **Inter Hall Activities**.

Hobbies include **Sketching**, road trips, trekking and **Crypto-currencies**.