

Hello

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

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Linkedin : in.linkedin.com/in/sushovanmandal ; Github: github.com/enlightner

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](#) 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

AISSE 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**.