NIRMAAN J SARKAR | 16AG10017

AGRICULTURAL & FOOD ENGG.(B.Tech 4Y)

NIRMAAN J SARKAR
10.12.2015

EDUCATION

Year	Degree/Exam	Institute	CGPA/Marks
2020	B.TECH	IIT Kharagpur	6.49 / 10
2016	Sr. Secondary	National Institute of Open Schooling	72.8%
2014	Secondary	National Institute off Open Schooling	64.4%

SKILLS AND EXPERTISE

Skills: Machine Learning (Python, Tensorflow, OpenCV, etc.) | Web Developement (HTML, Javascript, CSS, PHP, ASP.NET, C#, SQL, etc) | Android Deveopement (Java, XML) | Embedded Electronics (C, C++, etc)
Softwares: Spyder, Jupyter Notebooks, Eclipse, Adobe Creative Suite(Photoshop, Premier Pro, After Effects, Flash, Actionscript 2, 3, etc) | Digital Audio Workstations (FL Studio, Cubase, Pro Tools, Ableton, etc) | Microsoft Office

INTERNSHIPS

Machine Learning Intern, Learteq Solutions | May 2019 - July 2019

- Explored Several Machine Learning Solutions using Scikit Learn and TensorFlow for their existing Learning Management System.
- Developed a Binary Classification Algorithm and Rating System to provide Real-Time Predictions and Analysis of Learners who are taking tests through the Learning Management System.
- Deployed the Model as a RestAPI in a Docker Container running on a Virtual Machine in Azure Cloud.

Deep Learning Intern, IBM Cognitive Computing and Analytics | December 2018 - January 2019

- Designed an Approach for Classification of Legal Texts and Contracts for Regulatory Compliance using Natural Language Processing and LSTM Neural Networks.
- Learned how to use several Natural Language Processing Tools from different libraries including NLTK, Spacy, Gensim, etc.
- Built a preprocessing and feature generation framework according to the data and prepared test models using a BiLSTM Neural Network Architecture.

Web Developer, Flipshope | September 2016 - October 2016

- Design and Development of the Diwali offer web page reaching out to 5000+ Viewers.
- Updated the Chrome Extension to incorporate all the special offers during Diwali Season.

PROJECTS

Bachelor Thesis Project, Agricultural and Food Engineering, IIT Kharagpur | July 2019 - Present

Disease Detection and treatment for Agriculture using an Unmanned Aerial Vehicle:
- Programmed missions for traversal of agricultural fields.
- RGB Camera for Detection and Classification of Diseases using the onboard processor.
- Spraying nozzle and onboard tank for Medicine or Pesticides to instantly spray on the point of interest.

POSITIONS OF RESPONSIBILITY

Student Member, Students' Alumni Cell, IIT Kharagpur | July 2017 - April 2018

- Organized the 15th Annual Alumni Meet for the graduating batches of 1968, 1978 &1993.
- Generated INR 2.6 million through Corporate Engagement Programme for the 15th Annual Alumni Meet.
- Mentored and led a team of 12 Associate members to assist the executive team in organizing the meet.
- Responsible for planning and executing the Alumni Career Assistance Program, 2018.
- Compiled, designed and published the annual magazine 'Yearnings of Yore' and the 'Institute Yearbook'.
- Assisting the Institute Development Programme Team in 'My Imprint Class Gift Campaign'
- Conducted Alumni Talks, Leadership Summit &e-Guest Lectures by alumni from diverse fields of expertise.
- Working on the planning and execution of New Initiatives which include the Student Endowment fund, Class Map of KGP, PlanetKGP, Alumni Career Assistance Program, Alumni Newsletter, etc.

Coordinator, Technology Film and Photography Society | July 2016 - Present

- Helping to provide a platform for students interested in Filmmaking and Photography to work together and equip IIT Kharagpur with a powerful Filmmaking organization for its perennial needs.
- Spearheaded 2 Short Film Projects as Director, Cinematographer and Editor reaching out to 15,000+ viewers.
    Masquerade (2017)
    Quantum Suicide (2018)
- Managed and led a crew of 10 Members during the production of these short films.

WORK EXPERIENCES

Web Developer, GlobalMUN IIT Kharagpur | November 2017 - January 2018

- Designed the website for the publicity and online operations for organising the Global MUN 2018 held in Kshitij'18.

COURSEWORK INFORMATION

Digital Signal Processing | Stochastic Processes in Finance | CAD Simulation | Tractors and Power Systems | Manufacturing Management | Food Engineering | Land and Water Resources Engineering | Theory and Design of Machine Elements | Probability and Statistics | Basic Electronics | Thermodynamics | Fluid Mechanics | Crop Production Technology | Partial Differential Equations | Prgramming and Data Structures

EXTRA CURRICULAR ACTIVITIES

Guitar:
Been practicing guitar since 2014.
Part of the bronze winning Western Vocals Team of Lal Bahadur Shastri Hall for the academic year 2016-2017
Part of the Western Groups Team of Lal Bahadur Shastri Hall for the academic year 2016-2017
Part of the Eastern Groups Team of Lal Bahadur Shastri Hall for the academic year 2016-2017
Film Making:
Cinematography and Editing for the Silver-winning Short film by B R Ambedkar Hall for the InterHall Short Film Making Competetion during the academic year 2018-2019
Basketball:
Part of the silver winning Basketball Team of Lal Bahadur Shastri Hall for the academic year 2016-2017
Trained under National level coaches for 5 years in the Sports Authority of India
Karate:
Brown Belt under the style of **Kyokushin**.
Green Belt under the style of **Taekwondo.**