# **SOMYA UPADHYAY**

## **EDUCATION**

B.E. in Mechanical and M.Sc. in Physics	Birla Institute of Technology and Science, Pilani	(June 2022)	CGPA: 7.23/10.0
ISC (CLASS XII)	Loyola School, Jamshedpur	(March 2016)	Score:91%
ICSE (CLASS X)	Loyola School, Jamshedpur	(March 2014)	Score:90.17%

## **EXPERIENCE**

HCL Software Technical Lead	Joined the X.AI team where I took AI use case from POC to development to deployment.  Modelled a solution to visualise engagement for HCL client businesses.  Increased Engagement through various channels using AI based predictive scoring.	July 2022- Current
MySmartPrice.com Backend developer	Worked for an e-commerce SAAS product to maintain client consumer engagement.  Managed relational database and AWS cloud services to launch and test APIs.  Added functionalities for messaging and notification workflows for differentiated plans.	July 2021- Dec 2021
Tata Steel Vacation Trainee	Got certified Machine Learning Training with tests from Capability development.  Reduced cost by 9% in Desulphonation process by designing optimised  Regression model using Machine learning.  (https://github.com/somyaup/Desulphurisation)	April 2020- May 2020
Indian Red Cross Society IT intern	Improved Disaster Management Team's reach by designing an app to notify volunteers during disasters using Android Studio with Django backend framework.  Added SMS posting feature for Team members to reach 500 volunteers in a single click.	May 2019- July 2019

## **PROJECTS**

Matter - Antimatter symmetry in the Universe	This thesis involved investigation in Standard Model and alternative Grand Unifies theory contenders in Nuclear physic.  Survey of latest particle physics lab experiments technology by CERN and associated universities like Realising Asymmetry's connection to black hole formation.	Jan 2022- Jun 2022
Artificial neural network application in solving heat conduction equation	Proved ANN as accurate method to simulate heat maps other than numerical techniques like FEM with reusable learning by solving the Heat conduction equation using Neural Networks. (https://github.com/somyaup/2-D-steady-state)	Jan 2021 - May 2021
Using Neural Networks in Schrödinger equation	Simulated Particle in a box that showed consistency with theoretical results for harmonic oscillator and constant energy using Physics informed neural network to solve Schrodinger. (https://github.com/somyaup/PIB-using-PINN)	Aug 2020 - Dec 2020
Simulation of electromagnetic waves in plasma	Simulated Electromagnetic waves utilizing MATLAB to elucidate the properties of waves in plasma applying the Finite Difference Time Domain method with boundary considered energy absorbing.	Aug 2019 - Dec 2019

# SKILLSET SUMMARY

Certifications	Database	Languages	Technology	Courses
deeplearning.ai by Andrew NG Tensorflow for Professionals, SQL, JavaScript Basics HackerRank Problem Solving, HackerRank Java, Python Yale Financial Markets,	GCS , bigquery, AWS RDS , MySQL workbench ASW SQS,	Python, Java, SQL, C, C#, MATLAB, Object Oriented Programming,	Jira, Github, kubeflow, Kserve, Tensorflow, MLOPs, Fast API, GCP, MATLAB, Microsoft Office, Postman,	Supply Chain Management, Computational Physics, Computer Aided Design, Probability and Statistics, Quantum Computing, Computer Programming, Engineering Optimisation

## **EXTRACURRICULAR**

Department of Photography Designer	Generated rupees two lakhs in revenue per fest through commercial photography, design and sale of merchandise for 15 college fests.	Aug 2017 – Jun 2022
ACM Student Chapter Member	Organised interest groups for Machine Learning, among others.  Managed technical events and gaming events during the Technical Fest, Apogee attended by over 1000 students from colleges all over India	Aug 2017 – Jun 2022

## **LANGUAGES**

English, Hindi

## **CONTACT**

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