Somdev Basu

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EDUCATION

Netaji Subhash Engineering College, MAKAUT Affiliated *Kolkata, India*
Bachelor of Technology, Computer Science & Engineering (6.8, 7.78, 7.77, 9.1, 9.33) **June 2022(Expected)**
Courses: Operating Systems, Data Structures, Algorithms, Database Management Systems, Theory of Computation and Automata, Computer Networks

The Aryans School *Kolkata, India*
Indian School Certificate, *Science with Computer Science* (83.00%) **June 2018**

The Aryans School *Kolkata, India*
Indian Certificate of School Examinations, *Science with Computer Applications*(93.00%) **June 2016**

SKILLS

- C (pointers, functions, arrays), JAVA (OOP concepts), C++ (vectors, sets, maps, trees, graphs)
- Python(Numpy, ScikitLearn, Matplotlib, Pandas for Machine Learning, Data analysis)
- Operating Systems(Processes, CPU Scheduling Algorithms, Deadlocks, File Management) & DBMS (ER Model, Relational Model, SQL, Normalization, File Organization)
- Computer Networks(OSI, TCP/IP Models, Data Link Layer, Routing Protocols, IPV4 Addressing, Transport and Application Layer Protocols)
- Web Development(Front-end: HTML, CSS, Back-end: Flask(Elementary): Deployed ML Models)

Leadership and PoRs: Organized sessions, conducted workshops and delivered talks, as the *President of the Linux Users' Group*(*GNX*), focussed primarily on *Linux, Git and Open Source Development Projects. Volunteering* as *Microsoft Student Partner*. *Secretary General* of the NSEC Debating Society and MUN.
Extra-Curricular Activities: Photography, Leadership, Blogging, Playing Music, Public Speaking, Debating
Languages: English, Hindi, Bengali

PROJECTS

Used Car Price Prediction System *github.com/bosecodes/Car-Price-Prediction*
Flask backed end-to-end ML project. Utilised the best fit approach to predict the prices of used cars.
Dog Breed Classifier using Transfer Learning *github.com/bosecodes/slytherin-slingshot*
Transferred MobileNet to create a simple Neural Network that classifies & recognizes dog breeds.
Pustak Premik *github.com/bosecodes/Pustak-Premik*
Used KNN neighbors to implement a Book Recommendation System.

WORK EXPERIENCE

Tessellate Imaging (Monk AI) *Pune, India*
Computer Vision Researcher *June 2020 - September 2020*
Worked on Document Layout and OCR classification. Worked with MonkAI open-source library(e.g. model optimization, application oriented approaches, etc.)

TeamCognito *Kolkata, India*
Machine Learning Engineer *February 2020 - April 2020*
Work was centered around Vehicular Damage Detection, Object Detection & Image Segmentation

Educare Educational Services *Kolkata, India*
Computer Applications Mentor and Lecturer *December 2019 - Present*
Mentored students for International Computer Aptitude Olympiads, Board exams

ACHIEVEMENTS

NASA: SpaceApps Challenge (Oct' 19) - #3rd, National Regionals, India LSTM model to collect air pollution data and projected conclusions on the parameters affecting AQI and overall breathability.
Smart India Hackathon (Jan' 2020) - #1st in Regional Institute Level Ideated an AI-backed system on Antimicrobial Stewardship and brought to use several aspects of current drug development procedures.
NEC Hackathon: Environment (Mar' 20) - Top 5 in the Country Suggested an innovative solution based on IOT and AI to help curb water pollution & provide an efficient monitoring system to work with.

KPIT Sparkle Hardware Challenge - Top 100 out of 30K+ students: *Hell-Met:* An implementation of a hardware Smart Helmet, integrated with a Flutter app, with embedded safety, security and SoS features.

Hult Prize 2020 Institute-level Winner: Qualified for APac Regional Finals
Honoured by MSME at Sister Nivedita University, Kolkata, and at IEEE Science Congress, Kolkata for creating a Smart Home Automation System, the project was completed in 1st year itself.
Competitive Coding Challenges: 5 stars on *HackerRank*, Working on a 30 day challenge currently, HashCode from Google 2020, CodeChef SnackDown 2019
Publication & Certifications: Smart Entry/Exit Based on Detection of Face-mask and Body Temperature for COVID-19 (publication in progress), Joy of Computing using Python(NPTEL), Applied Machine Learning in Python by University of Michigan(Coursera) (Links to all Certificates)