

Somdev Basu

somdev.co | somdevbasu100@gmail.com | 7980471404 | LinkedIn | GitHub | ACM

Education

Netaji Subhash Engineering College,
Bachelor of Technology in Computer Science &
Engineering, MAKAUT, Kolkata
2022, Aggregate CGPA: 8.6/10.0

The Aryans School, Kolkata
School Board Examinations
ISC - 2018 Percentage: 80.50%
ICSE - 2016 Percentage 91.33%

Experience

Project Intern Feb '22 -
Apr '22
Tata Research & Innovation Labs Pune,
India
Built a Markov based model to generate a structured
approach to Interaction Systems. Utilized extensive
research to develop models and study metrics.

Software Engineer Intern Jul '21 -
Sep '21
Telaverge Communications Bangalore,
India
Worked on OCR based models on pyTesseract and
Amazon Textract. Worked on scalable and elastic ML
pipelines on OCR readability, classification and Object
Detection

Computer Vision Research Jun -
Sep '20
Tessellate Imaging Pune,
India
Worked on Document Layouting and OCR
classification. Worked with MonkAI open-source
library(model optimization, training, application
oriented approaches)

Machine Learning Engineer Feb -
Apr '20
TeamCognito Kolkata, India
Work was centred around using several Mask R-CNN
models for Object detection and Image segmentation
for Vehicular Damage Detection.

Technical Skills

Programming C, C++, Python, JAVA,
HTML, CSS, VanillaJS

**Softwares and
Libraries** Numpy, ScikitLearn,
Matplotlib, Pandas for
Machine Learning, OpenCV,
Keras, Tensorflow, Flask

Certificates

Certificates and LoRs

**Positions of
Responsibility** President of GNX, The Open
Source society of NSEC

Personal Projects

Flight Price Prediction System Flask backed end-to-end ML project

- Analysed and utilised Random Forest Regressor
based model to predict Flight Prices based on
historical data.
- Boosted accuracy from **82.76% to 89.48%**.
- Used: Numpy, Pandas, OpenCV, Seaborn,
Matplotlib, Flask, Git LFS, Heroku.

Smart Home Automation Device

- Wifi based **ESP8266** module on
NodeMCU-incorporated Blynk app, for controlling
home appliances through mobile devices.
- Used: Arduino IDE, Flask, Heroku, IFTTT, Google
Actions, Blynk

Dog Breed Web-Classifer

- Trained an ImageNet Classifier. Used a
MobileNetV2 model with a few customised layers.
The multi-class categorical cross entropy loss was
optimised.
 - Got **91.2% testing accuracy**.
 - Used: Numpy, Pandas, Matplotlib, Transfer
Learning, Neural Networks, Flask, AWS EC2
-

Achievements

NASA SpaceApps Challenge '19 #3rd, National
Regionals

**Smart India Hackathon '20 - #1st in
Regional Level** (Statement by Amazon)

Hult Prize: Qualified for APac Finals

Publication & Certifications: *Smart Entry/Exit
Based on Detection of Face-mask and Body
Temperature for COVID-19 (IEEE publication in
progress)*, Joy of Computing using Python(NPTEL),
Applied Machine Learning in Python by University of
Michigan(Coursera).

Soft Skills

Leadership, Public Speaking, Technical Writing.

Hobbies

Photography, Blogging, Debating, Salsa, Guitar.

Languages

English, Hindi, Bengali