Shreyas Bapat

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EDUCATION

INDIAN INSTITUTE OF TECHNOLOGY MANDI
BTech in Electrical Engineering
Expected Jun 2020 | Mandi, India
Cum. GPA: 7.51

MISS HILL H. SEC. SCHOOL
Class XII
Grad. March 2016 | Gwalior, India
Central Board of Secondary Education
Percentage : 93.4%

KENDRIYA VIDYALAYA NO. 1
Class X
Grad. March 2014 | Gwalior, India
Central Board of Secondary Education
CGPA : 10

LINKS

GitHub:// **shreyasbapat**
(Every project is made open on GitHub)
LinkedIn:// **shreyasbapat**

COURSEWORK

UNDERGRADUATE
Data Structures and Algorithms
Pattern Recognition
Artificial Intelligence
Introduction to Communicating Distributed Processes
Computer Organisation
Signals and Systems

SKILLS

PROGRAMMING
Python • C++ • C • Flutter
Erlang • Assembly
WEB DEVELOPMENT
Flask • Dash • CSS3 • HTML
Sphinx • Django
TOOLS/MARKUP
git • virtualenv • numba • Keras
LaTeX• ReStrctured Text • YAML

AWARDS

KVPY Scholar 2016-17
Aryabhat Astronomy Quiz: Rank 2/4500
Mentor @ Astronomy Code Camp Delhi

INTERESTS

Deep Learning
Data Visualisation
Astrodynamics

WORK EXPERIENCE

POLIASTRO | Software Development Intern
May 2018 - Aug 2018 | Work From Home

- Implemented interactive 2D plotting, refactoring the plotting module to create backends and orbit simulation. Fixed hyperbolic orbits.
- Developed module being used by scientists in ESA (European Space Agency) to simulate orbits of various objects in space.

PUBLICATIONS

PROJECTHIKO 1.O - THE VOICE AND INTERNET ENABLED SMART HOME | Co-Author
June 2017 | IJETSR ISSN: 2394-3386
Cost Reduction in home automation. Used flask for handling backend. Implemented Speech Recognition.

PROJECTS

VLBI IMAGE RECONSTRUCTION | Undergraduate Research
June 2018 – Present | Mandi, India
Reconstruction of Radio Sprectrum Data taken by Event Horizon Telescope using Deep Learning. Currently using Autoencoders. Technologies Used: Python, Keras, Tensorflow,

EGO-NONEGO VIDEO DETECTION | Undergraduate Research
Feb 2018 - May 2018 | Mandi, India

- Video Classification on the basis of position of camera.
- Implemented a Autoencoder to create Optical Flows by taking video frames. Used ResNet50 for classification.
- Technologies Used: Python, matplotlib, MATLAB, Keras, Tensorflow

FABRIC DETECTION | Undergraduate Research
Jan 2018 - Mar 2018| Mandi, India

- Implemented Transfer Learning to train an encoder to reduce dimensions of microscopic fabric images.
- Used VGG network to classify the bottlenecks. Used tSNE to cluster the various classes. Technologies Used: Python, Keras

ASTROOL/ASTROOL | Lead Developer
Jan 2018 – Present | Mandi, India

- Author of a Python Library, Astrool - a library for computations related to positional astronomy and map generations.
- Published as a Pypi Package.

AYUSHMAN BHAVA | Design Practicum Project
Feb 2018 – May 2018 | Mandi, India
Created a smart medical vending machine with facility to contact doctor through video call. Applied Deep learning for false currency detection and classification.

EXOPLANET DETECTION | Developer
Jan 2018 | Chennai, India
Used K-Neighbour Classifier to classify if a given time series light data is from a star having exoplanets or not. Implemented SMOTE. Technologies Used: Python, matplotlib, pandas, scipy

RESPONSIBILITIES

CO-ORDINATOR | Space Technology and Astronomy Cell
June 2017 - May 2018 | Mandi, India
Awarded as Best SnTC Coordinator for 2018-19.