Shreyas Bapat

https://shreyasb.com b16145@students.iitmandi.ac.in | bapat.shreyas@gmail.com | (+91) 973 621 0570

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

Pvthon • C++ • C • Flutter Erlang • Assembly

WEB DEVELOPMENT

Flask • Dash • CSS3 • HTML

Sphinx • Django

TOOLS/MARKUP

git • virtualenv • numba • Keras **LATEX** • ReStrictured Text • YAML

AWARDS

KVPY Scholar 2016-17

Mentor @ Astronomy Code Camp Delhi matplotlib, pandas, scipy

INTERESTS

Deep Learning Data Visualisation Astrodynamics

WORK FXPERIENCE

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 1.0 - THE VOICE AND INTERNET ENABLED **SMART HOME** I 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

Frb 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 Aryabhat Astronomy Quiz: Rank 2/4500 star having exoplanets or not. Implemented SMOTE. Technologies Used: Python,

RESPONSIBILITIES

CO-ORDINATOR | Space Technology and Astronomy Cell

June 2017 - May 2018 | Mandi, India

Awarded as Best SnTC Coordinator for 2018-19.