# Shreyas Bapat

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#### **EDUCATION**

# Indian Institute of Technology Mandi

Mandi, India

Bachelor of Technology in Electrical Engineering: CGPA: 7.51/10.0

Aug. 2016 - Present

#### Publications

# Projecthiko 1.O - The Voice and Internet Enabled Smart Home

IJETSR- ISSN 2394 3386

Author

Volume 4, Issue 6 — June 2017

- Cost Enhancements: Deviced a very cheap and efficient way of making a home smart.
- Flask, Google Speech: Used Flask and HTML, CSS to create a web interface for handling the resources in home. Flask is a python based framework that can provide a stable backend to websites. Also implemented the Google Speech API to access the voice inputs of the user.

#### EXPERIENCE

# Poliastro - OpenAstronomy

Barcelona, Spain

 $Software\ Development\ Intern$ 

May 2018 - Present

- pypi release 0.10: Worked for the 0.10 release of poliastro.
- o Backends for Orbit Plotting: Restructured the whole plotting module and created two different backends for plotting. One using plotly and the other using mat-plotlib.
- 2D Interactive Plotting: Created a class for 2D plotting using plotly. This created interactive 2D plotting for

#### Indian Institute of Technology Mandi

Mandi, India

Teaching Assistant

Feb. 2018 - Jun. 2018

o Programming and Data Structures Practicum: Helped students understand complex Data Structures and Algorithms. Cleared their doubts for DS implementations in C

#### Projects

- poliastro: Open source python library for astrodynamics.
- Intelligent Fabric Detection and Classification: A Deep Learning Model to identify the fabric and classify it into different classes. Data Based Training.
- Ayushman Bhava: A smart medical vending machine with video conferencing with doctor, Payment gateway enabled for online payment. Deep Learning for Cash detection.
- Exoplanet Detection: A Machine Learning based prediction model which predicts the presense of Exoplanets on a star by the brightness data of that star over a long period of time.

#### Programming Skills

- Languages: Python, C/C++, shell, NASM, Erlang, JavaScript, Dart(Flutter), MySQL
- Web: Flask, Dash, HTML5, ,CSS3, Materialize, JavaScript, Django
- Markup: LATEX, Markdown, ReStructured Text, YAML
- Technologies and Libraries: git, mercurial, PyCharm, plotly, mayavi, Tensorflow, Keras, numba JIT

#### Presentations and Talks

# Astronomy Code Camp - Nehru Planetarium, Delhi

New Delhi, India

Mentor and Presenter

Jun. 2018

o Scientific Computing: Introduction to various scientific computing packages such as poliastro, astropy, pyephem to the participants.

# 6th ICETSMI-2017

IETE, Delhi, India

Presenter in 6th International Conference on Eng. Tech., Science and Mngmt. Innovation

Jun. 2017

o Paper Presentation: Presented the paper titled, ProjectHiko1.O - The Voice and Internet Enabled Smart Home at the conference.