**VibhuBhatia**
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Portfolio: vibss2397.github.io

## Education

**Boston University** — Boston, MA
*Master of Science in Computer Science; GPA: 3.75/4* — *Expected May, 2021*

**Netaji Subhas Institute of Technology** — Delhi, India
*Bachelor of Engineering in Biotechnology; GPA: 7.6/10* — *2015-2019*

## Skills

**Languages**: Python, Javascript, C++, Matlab
**Frameworks**: Node.js,Express.js, Tensorflow, keras, Laravel, ReactNative, Matplotlib, Pandas
**Database**: SQL, MongoDB
**Technologies**: git, Android Studio, Docker, Linux, OpenCV, WebSocket, RESTful API

## Experience

**Optimal Lab, BU** — Boston, MA
*Research Assistant* — *June, 2020 - Present*

- Designed **simple unit tests** to **compare the robustness and performance** of implementation of different **optimizers** as compared to **SGD** available in pytorch library.

**BU Spark!** — Boston, MA
*Innovation Fellow (**Backend Engineer, NextChange**)* — *February,2020 - May,2020*

- Built the data pipeline engine for collection and processing of **raw trading data, candlestick data**(for different time intervals) from major crypto exchanges like binance, krakken etc using **websockets in python**.
- Created a REST API for **accessing data via queries** using node.js, and created a server for providing **real-time price updates** to clients via js websockets.

**LeanTrack** — New Delhi, India
*Lead Strategist* — *September 2017 - January 2019*

- Provided advisory services for **over 20 early stage startups** and helped build their tech platforms, connect to investors and generate profits using a **data driven approach**.
- Researched, developed and automated the **LSAAT(startup ability assessment tool)** model to rate startups.
- Created **Rest API and Deployed micro services** using Express.js and docker containers in Nginx for hosting **trained models, Payment Gateway and Email Automation**.

## Projects

- **Cats vs Dogs** Active Learning for Efficient Labelling of Image Data
  - Used **Adaboost algorithm** to train many **weak learners(shallow NN)** using active learning to label images containing cats and dogs, producing results close to a **baseline CNN** using just **41% of the training data**.
- **Microscopy Image Super Resolution** Undergrad Research@NSIT
  - Proposed changes in the architecture for **Super resolution GAN** model for improving the quality of SR images. Built an **end-to-end web portal** for transferring images via the camera to one's computer using websockets.
- **Task scheduler**
  - A javascript based **debuggable CPU scheduler** which simulates different OS preemptive scheduling algorithms such as **Round Robin, Rate Monotonic and Earliest deadline**
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## EXTRACURRICULAR ACTIVITIES AND ACHIEVEMENTS

- Got recognised as an innovative product by Bose in **Boston Hacks, 2019**.
- Acting as Technical Head of **Ecell, NSIT**, mentored 50+ students for technical skill development and lead a team of 5 devs for developing ecell website.
- Started an Initiative **For Her**, to promote female entrepreneurship in India and incubated 5 female led early stage startups.