

Vibhu Bhatia

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EDUCATION

Boston University

Master of Science in Computer Science; GPA : 3.75/4

Boston, MA

Expected May 2021

Netaji Subhas University of Technology

Bachelors of Technology in Biotechnology; GPA : 7.6/10

Delhi, India

Sep 2015 – May 2019

SKILLS

Languages: Python, C++, JavaScript, Matlab, HTML/CSS, SQL, MongoDB

Libraries: Pytorch, Pyspark, Tensorflow, pandas, NumPy, Matplotlib

Frameworks: Node.js, Flask, React-Native, Laravel

Technologies: Git, Docker, Linux, GCP/ AWS, Android Studio, OpenCV, WebSocket, RESTful API

EXPERIENCE

Optimal Lab, Boston University

June 2020 – Present

Graduate Research Assistant

Boston, MA

- Created and Compiled a library of **10 1-D convex functions** and **12 pytorch optimizers**, designed **unit tests for optimizers** and **scaled it to multiple threads** reducing **running time from 30 hours to 2 hours** .
- Automated the process of obtaining the results, comparing with baselines and visualizing results.

BU Spark!

Feb 2020 – May 2020

Innovation Fellow(Backend Engineer, NextChange)

Boston, MA

- 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, Bibox and LBK 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 for further downstream tasks.

LeanTrack

Sep 2017 – Jan 2019

Lead Strategist

Delhi, India

- 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

ParaCov | *Simulating Covid-19 using parallel programming*

- A **simulation of Covid-19 spread and control** using testing in Boston University using **object oriented design** and **multithreading with openMP in C++**.
- Scaled the program to run **10000 nodes** in parallel and plotted Infection rates and death rates simultaneously using **gnuplot**.

Real Time Microscopy Image Super Resolution | *Undergrad Research@NSIT*

- Proposed changes in the model of SRGAN for improving the quality of SR images and ran experiments in python which achieved **better accuracy while running in lesser time**.
- Built a web portal and server using **Flask in python** and a mobile app using **react-native** which allowed users to **send images to computer via Websockets**.

NN-lab | *Train ML models in web browser*

- A javascript based **debuggable ML tool** which allows **customizable hyperparameters** in building Neural Network, **observe loss metric, perform inference** and download trained model.

LEADERSHIP EXPERIENCE

- Got recognised as 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.