Parhitosh Sharma **193110057**
Metallurgical Engineering and Materials Science **M.Tech.**
Indian Institute of Technology, Bombay **Gender: Male**
Specialization: Corrosion Science and Engineering **DOB: 13-05-1996**

Examination	University	Institute	Year	CPI / %
Post Graduation	IIT Bombay	IIT Bombay	2021	9
Graduation	Dayalbagh Educational Institute, Agra	Faculty of Engineering, Dayalbagh Educational Institute, Agra	2019	7.88
Graduation Specialization: Mechanical Engineering				

MASTER'S THESIS

Modeling Higher Order Strain Gradient Plasticity in Metallic Systems[June 2020-present]

Guide: Prof. Anirban Patra, Dept. of MEMS, IIT Bombay

- **Developed a higher order plasticity constitutive model** to account for Geometrically Necessary Dislocations (GNDs) and their effect on back stresses in the material.
- Implemented the model in the **open source finite element code, MOOSE using C++ & FORTRAN** followed by **model validation** using known test cases

INTERNSHIPS / TRAININGS

Terminal Ballistics Research Laboratory-DRDO, Chandigarh [April 18- August 18] [5 months]

- Project: **"Impact of Thin-Walled Projectiles with Concrete Targets."**
- Analyzed radial buckling in Thin-Walled Projectiles on concrete targets **using Solidworks and Ansys Autodyn.**

Neel Metal Products Pvt. Ltd., JBM Group, Haridwar [May 17- June 17] [30 days]

SoftTact Technologies, Mumbai [June 16- June 16] [7 days]

ADDITIONAL COURSES/ PROJECTS

Specialization: Applied Data Science with Python[2020]

University of Michigan hosted by Coursera

- Courses Involved: Introduction to Data Science in Python, Applied **Plotting, Charting & Data Representation** in Python, Applied **Machine Learning** in Python, Applied **Text Mining** in Python, Applied **Social Network Analysis** in Python.

Course: Data Analytics[2020]

Learners' Space conducted by Analytics Club, UGAC, IIT Bombay

- Learned to **Import Datasets, Cleaning and Preparing the Data, Summarizing the DataFrame, Model Development** (Linear regression, multi-linear regression, and ridge regression) and **Model Evaluation**.
- **Introduced to pandas**,, and use it to load, manipulate, analyze, and visualize cool datasets, then introduced to **scikit-learn, and used some of its machine learning algorithms to build smart models** and make cool predictions.

Course: Finance Bootcamp[2020]

Learners' Space conducted by Finance Club, UGAC, IIT Bombay

Self Project: Object-detection[2020]

- Deployed a **convolutional neural network (CNN)** for object recognition.
- Imported datasets from **Keras**, used one-hot vectors for categorical labels and **added layers to Keras** model.
- Loaded pre-trained weights and made predictions using a trained Keras model

TECHNICAL STRENGTHS

Programming Language: C| C++ | Python | Java | SQL | Matlab

Python Packages/Tools: NumPy, Pandas, Scikit-Learn, Seaborn, Matplotlib, TensorFlow, Keras, NLTK, Jupyter Notebook

Other Skills: Solidworks | Cubit | Ansys Autodyn | MOOSE | Origin Lab

AREAS OF INTEREST

Data Science | Statistical Analysis | Deep Learning | Machine Learning | Natural Language Processing | Computer Vision

POSITION OF RESPONSIBILITY & ACHIEVEMENTS

- **Company Coordinator**, Institute Placement Team, IIT Bombay(June2020 - present)
- Teaching Assistant for Computation Lab(MM 220), assisted batch 100+ B.Tech students with in-class assignments for **MATLAB & Python** and involved in evaluation of assignments(Spring 2019-20)
- **Team Leader for Inspiration Awardee team** CKC_TECHNOHOLIX in **Smart India Hackathon 2017.**
- **1st Prize** in Chain Reaction Event at IIT Roorkee(2017)
- **Young Systems Scientist Awardee** for Best paper Presentation in PARITANTRA, Tenth **Indian Students Systems Conference** (2016).
- **3rd Prize for Hackathon** in Sampravah, Annual Fest of Dayalbagh Educational Institute, Agra(2016)