



Saurav Raj
Metallurgical Engineering and Materials Science
Indian Institute of Technology, Bombay

170110062
B.Tech.
Gender: Male
DOB: 28-08-1999

Examination	University	Institute	Year	CPI / %
Graduation	IIT Bombay	IIT Bombay	2021	

PROFESSIONAL EXPERIENCE

Elemental Blockchain Lab Blockchain Analyst <i>[Dec '19 — Jan '20]</i>	<i>A WordPress for Blockchain nurturing students community to work on projects adding value to blockchain space</i> <ul style="list-style-type: none"> Contributed in designing the market driven algorithm and self-regulating economic model of Auxledger Created several Blockchain concept models on Electronic Health Record, Land Registry, Energy Trading etc Established design of prototypical blockchain based local energy market called Landau Microgrid Project
SpeedLabs EdTech <i>[May '19 — Jun '19]</i>	<i>Awarded a Letter of Recommendation (1 out of 6) from the Manager Content & software development team</i> <ul style="list-style-type: none"> Worked on 10k+ questions, solved 1000+ questions and proposed algorithms for improved assessment Analysed software architecture as a user and proposed changes in the framework affecting 1000+ users

TECHNICAL PROJECTS

Colour Image Classification <i>[Jun '20]</i>	Deep learning - Online self-project Worked on CIFAR-10 big dataset consisting of 32×32-pixel coloured images <ul style="list-style-type: none"> Developed model in Keras to segment 10 classes of colored images using Convolutional Neural Networks Accomplished 96% and 74% accuracy on training and testing dataset respectively using Baseline model Improved model accuracy by 12% on 10K test by Regularisation using Data Augmentation and Dropout
Titanic: Machine learning from Disaster <i>[Aug '19 — Oct '19]</i>	Machine learning and Data science project Kaggle competitions Predicting survival of passengers on Titanic <ul style="list-style-type: none"> Extracted 10+ decisive features by conducting Exploratory Data Analysis, visualization and Feature Engg Engineered a fast & efficient transformation of data using One-Hot-Encoding through ColumnTransformer Implemented algorithms like Gaussian-Naive Bayes, Logistic Regression, KNN, Decision Tree and SVM Attained 83% accuracy on train & 75% on test dataset with SVM; evaluated using K-Fold Cross Validation Achieved 85% accuracy through tuning using GridSearchCV and ensemble of models using VotingClassifier
Digit recognition <i>[May '20]</i>	Deep learning self-project MNIST-10 big dataset Ranked 1330 th among 2900+ teams on Kaggle competitions <ul style="list-style-type: none"> Built a Classifier to segment 28×28-pixel black & white handwritten images of digits 0 to 9 using CNN Obtained 97% accuracy on 42k training dataset and 90% accuracy on 28k test dataset using EarlyStopping

LEADERSHIP ROLES

General Secretary Hostel 4 IIT Bombay <i>[Aug '20 — Present]</i>	<i>Highest nominated representative of the hostel Leading a 3-tier council Managing a budget of INR 1 million</i> <ul style="list-style-type: none"> Adminstrating a revamp of mess & office Infrastructure providing contact-less service to 500+ inmates Pioneering a digital accounting system to simplify mess inventory and monthly billing of INR 1.5 Million Member of HGSC; Involved in various strategic & policy shaping activity, catering to over 10k students Managing first ever E-convocation and overall functioning of the hostel along with the fiscal transactions
Sports Councillor Hostel 4 IIT Bombay <i>[Apr '19 — Aug '20]</i>	<i>Elected by 550+ students as head of hostel sports affairs Led a 2-tier council Handled budget of INR 0.2 million</i> <ul style="list-style-type: none"> Honoured with Best Office Bearer (1 out of 38 members) for exceptional contribution as Sports Councillor Led hostel to Overall Runners-up (among 16 hostels) in Inter-hostel sports GC after a hiatus of 4-year Renovated hostel facilities by installing sports equipment resulting in 75% y-o-y increased participation Reduced 50% of publicity expenditure & saving 2k+ posters by implementing eco-friendly Digital Publicity Represented the hostel on institute committee in policy-making for 20+ events affecting 10k+ students
Sports Secretary Hostel 4 <i>[Jul '18 — May '19]</i>	<i>Conferred with Hostel Organisational Colour (2 out of 500+ students) for commendable work as sports secretary</i> <ul style="list-style-type: none"> Achieved 2-fold growth in overall participation by introducing new events and revising motivation models Optimised a budget of INR 0.15 million for sports, procured equipment by negotiating with 10+ vendors

ACCOLADES AND SCHOLASTICS

Accolades	<ul style="list-style-type: none"> Honoured with Institute Sports Commendation award given to only 3 out of 16 hostel sports head ['20] Awarded Hostel Cultural Color (2 out of 500+) for exceptional contribution towards hostel cultural ['19] Received Hostel Sports Special Mention (7 out of 400+) for exemplary contribution in hostel Sports ['20]
Technical Skills	<ul style="list-style-type: none"> Programming language – Python, C++, MySQL, Scikit-learn Software – Tableau, Solid works, AutoCAD
Scholastics	<ul style="list-style-type: none"> Relevant Courses: Intro. to Machine learning (EE 769), Deep Learning (IE 643), Data Mining (ME 781) Online Certifications: Python for Data Science (NTSS training, IITB), IBM Data Science - Coursera (ongoing)

EXTRA-CURRICULAR ACTIVITIES

Sports	<ul style="list-style-type: none"> Bagged silver medal in Institute Power lifting open ['20] Secured Bronze medal in Carrom GC ['19] Won Gold as a team in CROSSY GC marathon ['19, '20] Part of Inter IIT cricket camp team IITB ['18]
Cultural	<ul style="list-style-type: none"> 2nd Position (among 10 hostel) in Gyrations GC ['18, '19] 2nd Position as a team in Dance Mania ['17] 2nd Position as team in Institute Main Dramatics GC ['19] 2nd Position as team in Kavya Sandhya ['19]
Miscellaneous	<ul style="list-style-type: none"> Got NCC A Certificate & Completed Year-long training under Maharashtra Engineering Regiment of NCC ['18] Social - Organized “SHE” workshops on menstrual hygiene in 50+ villages with 1 lakh+ pads distributed ['17]

Scholastic achievements and extracurricular activities are not verified by the Placement Cell