

# Raghav Mittal

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## PROFESSIONAL SUMMARY

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*Extensive experience as a data scientist* working on operations improvement, energy optimization & decarbonization strategies. Armed with the inferential thinking toolkit (AB testing, Causal Inference, and ML) I look forward to working with engineering teams driven toward responsible, effective, & resilient intervention.

## TECHNICAL SKILLS

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- **Programming Languages:** MySQL, Python, R, JavaScript, HTML, CSS, MATLAB, Octave, Bash
- **ML Libraries:** NumPy, Pandas, SciPy, TensorFlow, Scikit-Learn, Keras, OpenCV

## EXPERIENCE & PROJECTS

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**University of California, Berkeley** *California, US*  
*Graduate Student Instructor, Dept. of Data Science, Statistics, ESPM* *Jan '22 - Dec '22*

- Led discussion sections - reviewed the subject matter, facilitated an enhanced understanding of course content, provided individual help & assisted with grading for **175 students over 4 courses**
- Courses including *Human Contexts and Ethics of Data* and *Introduction to Statistics*.

*Academic Project, Mentor: Prof. Hany Farid*

**Classification of war-destroyed buildings in Syria using Satellite Imagery** *Oct '22 - Dec '22*

- Investigated the performance of SVM on HoGs vs Neural Networks for improving automated detection of severely damaged buildings in the civil war-affected regions using high-resolution satellite images.

*Academic Project, Mentor: Prof. Zachary Parados*

**Indoor Localization based on BLE Signal Strength using Machine Learning** *Aug'21-Dec'21*

- Designed machine learning models using ensembling methods to accurately predict the indoor locations with the provided Received Signal Strength Indicator (RSSI) values from an array of iBeacons.

**M.N. Dastur & Co., Leading Engineering Consulting Firm for Heavy Industries** *Kolkata, India*

*Data Scientist, Energy & Process Metallurgy Division* *Oct '19 - Jun '21*

- Analytics lead for the team that identified 17 operations improvement initiatives with a **potential of saving \$65 Mn annually** for a Mexico-based Integrated Steel Plant.
- Determined data-driven insights to implement five revised SOPs, **saving them \$21 Mn annually**.

*Analyst, Energy & Process Metallurgy Division* *Jul '18 - Sep '19*

- **Developed predictive models** for assisting Steel Melt Shop operators exercise better process control.
- Conceptualized the Acid Gas Removal system for **world's first Hyper-Scale CO<sub>2</sub> EOR enabling Petrochemicals Complex** for a UAE-based Oil & Gas Company

## EDUCATION

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**University of California, Berkeley** *August '21 - December '22*

*M.S., Development Engineering, Artificial Intelligence Focus*

- *Honors:* Recipient of Simone Sciobereti Scholarship

**Indian Institute of Technology, Kanpur** *July '14 - June '18*

*B.S., Materials Science & Engineering*

- *Honors:* Recipient of Summer Undergraduate Research Grant for Excellence

## MISCELLANEOUS

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- *Publications:* Published & presented 4 papers at **AISTech** and **METEC Conference Proceedings**
- *Sports:* State-level **Basketball Player (U-19)**, **endurance runner**, **cyclist & avid trekker**.