Wrik Bhadra

Email: wrik18027@iiitd.ac.in **LinkedIn:** https://www.linkedin.com/in/wrik-bhadra

Research interests

Computer Vision, Machine Learning, Multi-modal Learning

Employment

Rakuten India Bangalore, India
Software Engineer - Machine Learning Aug 2021 – present
Software Engineer Aug 2020 – Jul 2021

Education

IIIT Delhi New Delhi, India
M.Tech. in Computer Science and Engineering 2018 – 2020

Techno India University, West Bengal Kolkata, India
B.Tech. in Computer Science and Engineering 2014 – 2018

Papers / Patents

Antenna Damage Detection - Bending Estimation (Patent) 2021
Nithish Divakar, Wrik Bhadra
Patent drafting in final stages on behalf of Rakuten Mobile for a vision-based system that estimates bend (structural damage) in cellular antenna towers.

Generalized Prediction of Hemodynamic Shock in Intensive Care Units
Aditya Nagori, Pradeep Singh, Sameena Firdos, Vanshika Vats, Arushi Gupta, Harsh Bandhey, Anushtha Kalia, Arjun Sharma, Prakriti Ailavadi, Raghav Awasthi, Wrik Bhadra, Ayushmaan Kaul, Rakesh Lodha, Tavpritesh Sethi
Intensive Care Medicine (Springer journal), 2021 [pending review]
medRxiv preprint link

Internships

Rakuten India Jun 2020 – Jul 2020
Software Engineering intern
Worked on full-stack development (Go backend, Vue.js frontend) of an Application Performance Monitoring system.

Rakuten Ready Jan 2020 – May 2020
Research intern
Studied the feasibility of identifying location types by learning location embeddings with triplet-loss networks as a multi-label classification problem.

Selected projects

Distracted Driver Detection Feb 2019 – Apr 2019
Supervisor: Prof. Mayank Vatsa, IIIT Delhi Team size: 3
Given dashboard images of drivers, our system aims to classify the driver on the basis of 10 predefined actions such as texting, speaking on the phone, reaching backwards etc. to detect distraction and alert them.
Kaggle challenge link

Enhanced Pattern Unlocking in Smartphones Sep 2018 – Nov 2018
Supervisor: Prof. Mayank Vatsa, IIIT Delhi Team size: 3
To overcome smudge attacks and over-the-shoulder snooping in swipe-based unlocking mechanism in smartphones, our system considers the actual haptic gesture and speed for authentication.

Skills

Programming languages: Python, MATLAB, Java, C/C++
Web/Application development: Python-Flask, Vue JS, MongoDB, SQL
Machine Learning: PyTorch, TensorFlow, scikit-learn
Tools: Bash, LaTex, Git, Jupyter Notebook/Lab, Docker

Relevant coursework

Computer Vision, Digital Image Processing, Machine Learning, Calculus, Linear Algebra, Computer Architecture, Information Retrieval, Machine Learning in Biomedical Applications

Mentoring & Interviewing experience

Rakuten India Jun 2021 & Mar 2021
Conducted technical interviews for a prospective full-time and three intern candidates for a separate business unit.

Rakuten India Nov 2020 – Jan 2021
Mentored a CS undergrad on a project involving application of image processing techniques.

Honors, Awards & Recognition

Rakathon - Rakuten India's annual hackathon 2021
Selected in the top 100 teams out of 900+ submissions under the AI - Healthcare category

Ministry of HRD, Govt. of India 2014
Letter of congratulation for performance in AISSCE 2014 (top 0.1% candidates across the country)

Volunteering

Coursera Jul 2016 – Present
Course beta-tester

Hobbies

Reading experiential books
Playing chess