Shreya Srivastava

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EDUCATION

IIT ROORKEE
Doctor of Philosophy
2017-present | Roorkee, IN

GBPEC, UTU
Masters in Technology
2015-2017 | Pauri Garhwal, IN

AMITY UNIVERSITY
Bachelors in Technology
2010-2014 | Lucknow, IN

AREAS OF INTEREST

Applied Research
Data Science
Computational Biology
Development

SKILLS

PROGRAMMING LANGUAGES
• Python • JavaScript

TOOLS
• VS code • Docker

FRAMEWORKS/LIBRARIES
•Pytorch • TensorFlow-Keras •
Django • React/React-Native

AWARDS

• Bioinformatics Contest 2021

• First Prize for Oral Presentation in Cardiovascular Research Convergence 2018

• Dhadkan Version 2 nominated as finalist in the 3rd Commonwealth Digital Health Conference and Award

•Graduate Aptitude Test in Engineering, AIR-755

LANGUAGES

English | Professional Working Effeciency
Hindi | Full Efficiency
German | Elementary Efficiency

EXPERIENCE

DHADKAN (OFFICIAL) | IIT Roorkee
Dec 2019 - Present | Playstore Link | Tech Stack: Django, React Native

- A cross-platform mobile app developed in collaboration with **AIIMS, New Delhi** for performing clinical trials on heart patients
- Data collected is processed through various handcrafted and ML algorithms
- Supports **real-time data** collection, processing and alert system using fitness bands and smartwatches

GOOGLE SUMMER OF CODE 2020 | Open Genome Informatics
May 2020 - Aug 2020 | Github Link | Tech Stack: Reactjs, D3js

- Designed and developed a Phylogenetic data analysis web application which includes Phylogenetic tree, Synteny, MSA viewer as a Main component.
- Bundled different views component and utility functions into an NPM package for increasing the reusability. [NPM Package Link]
- Developed a phylogenetic and MSA viewer **Plugin** for **JBrowse2**.

PROJECTS

ARRHYTHMIA DETECTION | Tech Stack: Python, TensorFlow
- End-to-end automatic heartbeat annotation pipeline using only input as ECG images
- Fuzzy logic alongside the deep learning model is also incorporated to achieve more accuracy and robustness

MELANOMA PREDICTION | Tech Stack: Python, TensorFlow
- Designed a pipeline for early detection of melanoma from images.

PUBLICATIONS

- Chakraborty P, Dipankar P, Dash SP, Priya, **Srivastava S**, Dhyani R, Navani NK, Sharma D, Sarangi PP (2019) Electrostatic Surface Potential of Macrophages Correlates with Their Functional Phenotype. *Inflammation (Springer)*, 1-10.[DOI]
- Chaturvedi S, **Srivastava S**, Gopichandran L, Seth S and Sharma D (2018) Dhadkan: A Mobile App for remotely monitoring and providing medical assistance to heart failure patients. *Cardiovascular Research Convergence 2018*, J Pract Cardiovasc Sci, 2018, 4, 171-6.[DOI]

CONFERENCES

- **Cardiovascular Research Convergence 2018** | AIIMS, New Delhi | October 12-13, 2018.
- **The 10th Indian Fisheries and Aquaculture Forum (10ifaf)** | ICAR- National Bureau of Fish Genetic Resources, Lucknow, India | November 12-15, 2014.
- **International Symposium on Neurosciences and XXXI Annual Conference of Indian Academy of Neurosciences & Local chapter of IAN** | Allahabad, India | October 25-27, 2013.