



Call for Internship with CSIR-NEERI **In association with CARE INC, USA**

About CSIR-NEERI: The CSIR-National Environmental Engineering Research Institute (CSIR-NEERI) is a research institute created and funded by the Government of India. It was established in Nagpur in 1958 with a focus on water supply, sewage disposal, communicable diseases and to some extent on industrial pollution and occupational diseases found common in post-independent India. NEERI is a pioneer laboratory in the field of environmental science and engineering and is a constituent laboratory of Council of Scientific and Industrial Research (CSIR). NEERI has five zonal laboratories at Chennai, Delhi, Hyderabad, Kolkata and Mumbai. NEERI comes under the Ministry of Science and Technology (India) of the central government. The NEERI is an important partner organization in India's POPs National Implementation Plan (NIP). For more details: <https://www.neeri.res.in/>

About CARE: CARE (Collaborative action for SARSCOV2 Eradication – 501c3 Charitable Corporation) is a brain-trust comprising of senior Doctors from Texas Medical Centre, MD Anderson Hospitals, PhDs and accomplished individuals in USA and India to help the world fight the COVID-19 menace. It is working with Doctors, pharma companies in promoting conducting prophylaxis trials for HCQ and Imiquimod, as well as working with schools, universities and institutions in helping young graduates and students to contribute in the fight against COVID via knowledge leadership. For more details: <https://www.careinc.info/>

Opportunity: CSIR-NEERI, in association with Care, calls for potential interns in the field of programming, simulation and modelling to work on challenging aspects related to environment and health.

Mentors: The interns shall be working with Director's Research Cell in CSIR-NEERI (Dr Rakesh Kumar; Dr Raman Sharma; Dr Sunil Gulia; Er Ankit Gupta and Er Hemant Bherwani) and remotely with Care, USA (Dr Swami Iyer, Dr Neil Sankar, Dr Vivek Gupta, Mr S K Chaturvedi (ex-CEO Auto Skill Development Council)). Internship will be “work from home” based.



Work Profile: Interns shall be working on emerging challenges related to the field of environment and health. The potential areas of work include Data Analytics, Deep Learning, Machine Learning, Artificial/Convolutional/Recursive Neural Networks, Python programming, Advanced Statistics, Probabilistic programming, Computational Fluid Dynamics and similar such areas which will help in decoding the mysteries of the above fields. Potential projects for the interns are listed below (list is not exhaustive):

1. Using ANN/CNN/RNN for predictive assessment of environmental parameters
2. Using advanced modeling and fluid dynamics tools for environmental parameters
3. Decoding Modified SEIR model using Python and deep learning tools
4. Understanding impact of microclimatic parameters on spread of infectious diseases using Deep Learning frameworks such as TensorFlow
5. Statistical Analysis for assessment of governing parameters environmental pollution
6. Comparing SLIAR, SIR, Simple SEIR and Modified SEIR models for their efficacy in prediction of COVID-19 and other infectious diseases cases.
7. Using deep learning and AI tools for assessment of impacts of social and behavioral aspects on environmental management
8. Allied Areas

Who Can Apply: Graduates and Post-graduates in Science, Engineering, Management and Social Sciences etc.

How to Apply: Interested candidates to send their CVs to drc@neeri.res.in. Last Date 30th June 2020

Selection Process:

1. Shortlisting of CVs
2. Virtual Interviews for Selection

Duration of Internship: Six Months

Award of Certificate: The candidate will be awarded the "*Certificate*" for having undergone internship after submission of "*Project Completion Report*" to NEERI and CARE INC

*******END*******