



Master Crystal Ball Reader (aka Data Science Manager)

Location: Remote, India;

Work at the frontiers of deep-tech and hardware innovation that fights for climate justice.

Background

Takachar is a global organization, spun out of MIT, with a vision to dramatically increase the amount of biomass (crop and forest residues) economically converted into useful bio-products. Our impacts include income and job creation in rural areas, as well as mitigation of CO₂ emission and air pollution associated with conventional open-air biomass residue burning. We have been recognized and supported by awards such as the Earthshot Prize, Elon Musk's X-Prize, Bill Gate's Breakthrough Energy Fellowship and the UNEP Young Champions of the Earth Award 2020.



Our work has been covered by some of the world's top media outlets.

CNN: [Turning crop waste to fertilizer could fight air pollution in India | CNN](#)

BBC: [Earthshot Prize: First ever winners announced - CBBC Newsround](#)

National Geographic: [Facebook Watch](#)

Role Description:

Through the operation of our reactor prototypes, we have collected significant amounts of data of different forms. Some of the data can be used to predict impending failures, improve/optimize our operations, and effectively coordinate amongst different reactor units in a fleet. As such, we have various data science and machine learning projects looking into different aspects of our work.

Your role will operate at two levels: technical and managerial. On the technical side, you will initiate new machine learning initiatives, including scoping out overall project requirements, instrumenting the reactor prototypes for satisfactory data collection, selecting the right dimensional reduction and machine learning (ML) models/approaches for a specific problem/objective, and validating that the ML models perform as required in the field. Some of these projects will be undertaken by yourself initially, and if they lead to promising results, we will put more data science assistants on the project to work under your supervision.

On the managerial side, you will manage our existing data science and machine learning workstreams—taking place internally within our company, and externally in collaboration with a research university—and tie all these workstreams back to the core product/services we are building. This will involve managing junior data scientists, interfacing with our collaborating university researchers, ensuring that the different workstreams are on schedule, and prioritizing our company resources according to the results that these workstreams demonstrate.

Requirements

- Be resident and work eligible in India.
- Be able to travel to the United States, Canada, India, and Kenya for short business trips (i.e. be in possession of a passport or similar document which allows you to enter these countries for short-term business purposes).
- At least five years of experience with applying machine learning techniques towards product development.
- Prior experience with sensors and instrumentation (needed to collect data needed for machine learning) strongly preferred, especially in a hardware product development context (e.g. Alexa, smart air conditioning or laundry machines, electric vehicles). Some sensors include: cameras, thermocouples, scales, etc.
- Willingness to do field travel when required.
- Prior experience managing a data science team and data science / machine learning projects of moderate complexity.
- Committed to build an inclusive work environment. We work with many disadvantaged communities such as First Nations as well as rural farmers in different cultures; abilities to engage well, learn, and listen to these communities is critical.
- Ability to think critically, work independently and willingness to constantly learn and adapt while working in a growing start-up environment.

To Apply

Please send your resume to careers@takachar.com.

What you will get:

- Salary and benefits commensurate to market rate and as per experience level.
- An opportunity to work with the world's most awarded biomass technology company.
- Opportunity to be at the forefront of climate action and pollution mitigation.
- A work environment that invests in your personal and professional growth.
- A culture that values empathy, curiosity & exploration.

Takachar is an Equal Opportunity Employer and does not discriminate on the basis or perception of race, colour, religion, sexual orientation, gender identity, national origin, disability, age, or any other consideration made unlawful by central government, state government, or local laws.