## Sangam AIC

## Job Description – Inverter Design Internship

## About Us:

AIC-Sangam is set up as a platform to bring together the best minds, resources and capital solving sustainability problems, and serve as a launch pad for inclusive and scalable enterprises focused on improving access to energy and resource productivity for the underserved in India. These enterprises will lead the way in driving inclusive development and creation of communities that are resilient to climate change. We are a non-profit doing incubation and acceleration as a charitable service. We have a simple philosophy, if we believe that a start-up's solution would be impactful to society, we want to help them be successful independent of likelihood or immediacy of an investment. Which is the main reason we are running an incubation and acceleration program in our Incubation facility, AIC Sangam. We will help the start-up grow and raise funds from either us or other sources.

We study the sector - its player, problems and the customer, before we venture in to incubating or accelerating any start-up in that sector. Our focus areas are: Energy Transition, Circular Economy and Competent SMEs.

Position : Product Design Engineer – Solar Inverter

Employment Type : Internship (3 months)

Location : Gurgaon

Salary : Rs10,000 – Rs 15,000 per month

Position : 3

Duties and Responsibilities : To create a working prototype for Hybrid Solar Inverter (2kVA – 5kVA) with MPPT circuit.

- Analyze and document new or existing Solar Hybrid inverters
- Design and analyze analog circuitry, digital signals, PWMs and GPIO
- Design power stages including estimation of losses and efficiency
- Design and analyze high frequency magnetics
- Maintain documentation of all designs
- Collaborate with in-house / external teams to perform cross-functional tasks as control, testing, layout
- Perform hands on testing of the Inverter

## Required Skills and Qualifications:

- M-tech (Electronics / ECE) Pre-final or Final year with focus in Power Electronics
- Familiar with design and analysis of power conversion topologies
- Familiar with power semiconductors: MOSFETs, IGBTs, etc.
- Experience with oscilloscopes, function generators and other testing equipments
- Familiar with MATLAB/Simulink, PSPICE
- Having idea about MPPT (maximum power point tracker) operation
- Interested in Inverter Designing
- Having idea about how Solar PV system works

How to Apply : Send your CVs to aritra@sangam.vc with subject line "CV-NAME-Inverter"

Prototyping Internship"

Selection Process : Simple 3 stage selection process

- 1. Application Screening
- 2. Telephonic Interview
- 3. Face to Face Interview