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ENGINEERING INTERN FOR BUILDING ENERGY EFFICIENT HEAT PUMPS FOR WASTE HEAT RECOVERY IN INDUSTRIAL PROCESSES

Job Details

Description

Orien Energy Inc. is an early-stage startup company that's revolutionizing waste heat recovery in heavy industries. Waste heat is ubiquitous in industrial processes, especially in the low-temperature range ($<450^{\circ}\text{F}$) which contributes to over 60% of the total inventory. This low grade waste heat is hard to re-use efficiently by traditional approaches. Orien Energy is trying to address this challenge by integrating water adsorbing materials into an innovative heat pump system to convert this low grade waste heat into premium process heat for industrial end-users in a highly-efficient, sustainable, and affordable manner.

As the Engineering Intern, your job entails assisting in programming a data acquisition (DAQ) system for a heat pump prototype, performing thermal-fluid

English



performing data analysis using MATLAB. The DAQ system will be a commercial

controls and sensors that will manage the thermal-fluid experiments. Depending on your strengths and interests the internship can be tailored accordingly, though you will get experience in experimental design, DAQ design, and post-processing techniques for general time-series data. You will be working directly with and mentored by the lead Mechanical Engineer, Dr. Zachary Welker on a day to day basis. You will also have the chance to work closely with the CEO and founder Dr. Yajing Zhao, who is an MIT course 2 alum (PHD'22). Experience in a lab environment, performing experiments, or doing DAQ programming is preferred. But you are still encouraged to apply to this position if you are an eager learner, want hands-on engineering experience, and are excited about making the world more sustainable and energy efficient!

Internship Location

Greentown Labs @ 444 Somerville Ave., Somerville MA 02143

Eligible Applicants

College Students / Master's Students

Sector

Energy Efficiency

Job category

Engineering

Primary activity

Engineering/Research

Number of interns requested

1

Hourly Pay

\$22.00 / hr (negotiable in the range of \$20-25/hr)

Pay Schedule

Biweekly