

# InfiniteCooling

Infinite Cooling's mission is simple: to mitigate water scarcity around the world. We help power plants and other industrial processes reduce their water consumption and water treatment costs by recovering water from their cooling tower exhaust. We have a patent-pending technology developed at MIT that uses electric fields to capture water from the plumes leaving cooling towers. We are a vibrant startup based in Somerville, Massachusetts, and we are on a mission to be a global leader in the water services industry for industrial applications. Infinite Cooling has won the MIT \$100K, MassChallenge, the DOE national Cleantech competition and numerous other awards. We are backed by leading investment funds and have received multiple government grants.

We are looking for a sharp, tenacious and creative Senior Electrical Engineer to join our team and work on all product development stages from R&D to design, prototyping, and testing through to manufacturing and installation. Strong communication, flexibility, and the desire to "wear many hats" will all be essential skills for a successful applicant.

## **What you will do:**

- High-Voltage System Design
  - Work with interdisciplinary team to identify constraints and select equipment, components and materials
  - Make custom wiring diagrams for customer deployments
  - Understand applicable codes and design compliant systems
  - Take into account electro-physics, mechanical constraints, and environmental conditions
- Controls System
  - Develop and deploy PLC-based control system
  - Select sensor suite and write software to integrate them into controls system
  - Review and comply with applicable codes for the industries the system is designed for
  - Write software to automate system according to operator's needs and sensor feedback, and enable control and telemetry over internet
  - Design and build networking protocols to interface with customer systems
- Data management
  - Create and update data management plan
  - Build and maintain useful databases
  - Analyze the collected data through the creation of software tools
- Research and Development
  - Review literature and identify best practices
  - Design experiments and test protocols and experimentally test various high voltage systems

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- Analytically and numerically model charge distribution and electric field in the system
- Help with lab experiments by creating simple software to automate data and analysis processes
- Systems design
  - Identify and address system level constraints and connection points
  - Perform cost-benefit analyses
  - Propose system improvements
  - Create and execute design verification plans
- Electronics Design and Fabrication
  - Design and build custom sensors
  - Design and build custom electronics for lab enhancement and product

## About you:

- You are passionate, genuinely curious and innovative
- You have unwavering personal integrity and work ethic
- You are proactive and productive – can complete tasks in a timely manner
- You are interested in working with your hands and building things
- You are independent and have a track record of successfully taking projects from start to finish
- You are adaptable and excel working in a fast-paced dynamic environment
- You are organized and used to frequent and clear documentation and communication

## Preferred skills:

- Bachelor's Degree or equivalent in Electrical Engineering or related fields. Master or PhD is a plus
- 3-7 years of experience. Experience with industrial products is a plus.
- Python, C++, Git, Jira, Bash, ladder logic, and Linux
- Experience with sensors, networking, image processing, and data acquisition
- Good understanding of electromagnetism and general physics
- Experience with experimental R&D
- Extensive hands-on experience building and testing electrical systems
- Relational database design and simple GUI/dashboard development
- Familiarity with electrical codes
- Familiarity with SolidWorks Electrical and industrial controls is a plus

## Current location:

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444 Somerville Ave., Somerville, MA 02143

**Contact:**

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