

Engineer Lead
At Kazadi Enterprises Ltd.
Chicago, Illinois

Hi, we're Kazadi Enterprises

Over the past ten years, we've seen the planet continue to heat and experienced the dramatic changes to the earth: higher temperatures, more energetic storms, changes to agricultural output. These changes are most directly attributed to our energy systems which are unsustainable, centralized, and heavily affected by a more variable environment. We believe that a decentralized, agile energy system is what is needed to meet continually growing energy needs. It's not our problem to solve alone, so we're looking for exceptional people to join our team. While the work requires that you be physically here in Chicago, we're happy to do our initial interviewing process remotely.

Kazadi Enterprises Ltd. was founded in 2020 and is currently headquartered in Batavia IL and has locations in Chicago Illinois and Lemont Illinois. Kazadi Enterprises has developed a novel technology that enables the acquisition and use of environmental heat as an energy source. This technology will enable cooling solutions that use up to 90% less electrical power than conventional solutions including refrigeration and space cooling. The technology enables a power-in-place model in which energy is harvested where it is used and this enables greater resilience, sustainability, and reliability of the energy people need to achieve their cooling needs. The company has been supported by the US Department of Energy through the Chain Reaction Innovations program at Argonne National Laboratory, the WERC Bench Accelerator, and the mHub Climatech Accelerator. In June 2022, LongJump VC backed Kazadi Enterprises with a small investment. In August 2022, our CEO Sanza Kazadi was named the Nicor Multicultural Innovator of 2022.

The Opportunity

As an Engineering Lead at Kazadi Enterprises, you'll be making a positive and crucial contribution by working to develop the core technology enabling our new energy platform and building out our first set of products either in house or in partnership with OEM manufacturers. As the Engineering Lead, you'll be working with the acting CTO to benchmark the capabilities of the technology and use these technologies to engineer our first products and develop the manufacturing processes required to bring them to scale.

What You'll Do

- You will work with the acting CTO at Argonne National Laboratory and/or mHub.
- You will lead the technical development of one or more product areas, bringing the product technology from TRL 3 to TRL 8 within two years' time or less.
- You will develop and maintain product development roadmaps that describe the key technical achievements in partnership with the CTO or acting CTO.
- You will aid in efforts to bring in funding through grants, sales, and venture funding.

- You will guide and lead training efforts for new team members as needed, helping the new team members to productivity.
- You will work with business development personnel to validate the business case and financials around the technology and shape the product(s) that you are developing.
- You will record all developments in the company's knowledge repository, making the developments you create easily accessible to other members of your team and the broader company.
- You will use your knowledge of physics and/or engineering to develop working theoretical models of the performance of varied components and systems, where appropriate, adding to a theoretical repository with which the technology can be modeled.
- You will build learning into what you are doing at Kazadi Enterprises and make it a meaningful part of what you do.

What you'll need:

- Ability to work at both sites: Argonne National Laboratory and mHub
- 5+ years experience in engineering product development in the area of heat transport and/or
- 5+ years experience with automation
- CAD / CAM experience
- Comfortable working in a machine shop with manual / CNC equipment
- An understanding of mechanics, thermodynamics, basic electrical circuits and circuitry, and basic engineering principles
- Knowledge of cooling systems (HVAC, Refrigeration, Evaporative Cooling, Absorption Refrigeration)
- Control systems' experience with Arduino, Raspberry PI, or equivalent
- Capability to assemble mechanical systems from parts correctly
- 3+ years experience managing team members
- The ability to work independently on complex tasks and a level of comfort when asking for help when appropriate
- An innate curiosity and a desire to deeply learn how to use the tools available to you and to teach those around you.
- A deep desire to help develop technology that might be a game changer

Nice to have

- System integration experience
- Labview, Matlab, Mathematica, Modeling Experience
- Experience with commercial refrigeration
- Formal management training

You will be a cultural fit if you are

- A resourceful, motivated team player who can contribute to a growing team of diverse individuals and expertise
- Excited about using technology to improve peoples' lives through sustainable technology development and deployment
- A builder capable and willing to pivot if and when the business grows and changes
- Excited by making and owning contributions to the technical growth of the core technology and company's knowledge repository
- Naturally interested in learning to build relevant skills and to apply these new skills to existing work
- Naturally interested in sharing things that you've learned with co-workers, helping to share your unique knowledge and perspective

You may contact us by doing the following

Please email your letter / resume to Dr. Sanza Kazadi (skazadi@kazadienterprises.com).

Kazadi Enterprises Ltd. is an equal opportunity employer. We do not discriminate on the basis of race, color, religion, gender, gender expression, age, national origin (ancestry), disability, marital status, sexual orientation, or military status, in any of our activities or operations. These activities include, but are not limited to, hiring and firing of staff, selection of volunteers and vendors, and provision of services. We are committed to providing an inclusive and welcoming environment for all members of our staff, clients, interns, volunteers, subcontractors