



## To Eliminate Energy Wastage Through Innovations In Continuous Energy Optimization

### Chief Technology Officer (CTO)

#### Summary:

Smart Joules is looking for a Chief Technology Officer (CTO) to drive the evolution of our technology platform to make energy savings simple, affordable and substantial at scale. We have designed our technology platform, called DeJoule™, on the latest IOT and web technologies to continuously identify and correct for hidden inefficiencies in dynamic energy systems such as air conditioning. In order to accelerate our impact, we are looking to ready this technology for mass-scale deployment and build new products to eliminate energy waste.

Your initial focus will be on leading the Product Development team to improve reliability and security throughout the technology stack, and design a software for easy integration with third-party building management systems, to allow for mass scale deployment in our existing and future client sites. You will spend time interacting with Smart Joules top management, energy engineers, field engineers and site managers to connect our software and its capabilities to our mission. These interactions require that you genuinely enjoy working on collaborative teams, and want to be involved in addressing large scale challenges that require long-term effort.

As Smart Joules' first Chief Technology Officer, you will have great ownership over the technology strategy and outcomes, as well as in strengthening the Product Development team within Smart Joules. If you are passionate about stopping climate change, a believer in collaborative and multi-disciplinary innovation, capable of building and leading young and passionate technology teams, an expert in IoT and ready to commit yourself wholeheartedly to build the company that will manage the largest number of Joules in India by 2025, we'd like to meet you.

#### Responsibilities:

- Help develop overall business goals by maintaining a sound technology strategy including timelines, budgets, performance metrics, etc.
- Review and improve our technology vision, roadmap and strategy to align with our overall company vision and mission.
- Provide top quality leadership and hold ultimate accountability for all scrum teams within product development – hardware, IOT software, Dev Ops, System Intelligence, System Reliability, Security, Front-end, UI/UX and Technical Support.
- Be a prime example of upholding Smart Joules' Core Values, and enabling Product Development team members to do the same.
- Integrate DeJoule's various data services and modules to power Joule Mind – our Artificial Intelligence engine.



- Develop, test and deploy a strategy to integrate DeJoule with any third-party automation system.
- Systematically improve reliability of embedded systems products and throughout the software stack, and ensure our final product operates without surprises and errors.
- Systematically review security threats and remove vulnerability throughout the technology stack.
- Build a vibrant, motivated and driven Product Development Team that is able to execute and perform at the highest levels.
- Provide leadership for Joule Labs – Smart Joules’ academic partnerships with universities – including recruitment of Joule Fellows, definition of problem statements, provision of mentorship, management and digestion of outputs, and shortlisting of Fellows for internships.
- Be hands-on, involved in writing code as much as leading the teams.
- Build visibility for Smart Joules’ technology leadership by participating in selected high-impact discussions and conferences, and through blogs and white papers.

#### Skills and Qualifications:

- Experience building IOT & cloud technology platforms, with deep understanding and experience with full-stack software development over newer MVC frameworks, and experience with embedded systems.
- 10+ years of progressive technology experience as an engineer and a team leader in cross-functional teams.
- Specific technical mastery required in System Design and Architecture, AWS, Database Administration (Big Data), Data Structuring and Algorithms.
- Experience in Javascript frameworks (Angular.js, Node.js), AWS managed services (SNS,SQS, IoT core, Dynamo DB, Lambdas, Kinesis and others), Python and related technologies.
- Master’s Degree in a relevant stream.
- Humility and collaborative spirit.
- Results Driven with demonstrated ability to bring a product to mass-deployment.
- Deep-seated ambition to have a significant impact at a global scale.
- Start-up or start-up-like experience is essential, you must be comfortable working in small, agile teams where responsibilities are broad.



### Compensation and Benefits:

- Salary + ESOPs
- Medical insurance
- Generous vacation policy
- Flexible hours working policy
- Fully paid maternity and paternity leave benefits

### About Smart Joules:

Smart Joules is on a mission to stop climate change by making it easy and profitable for businesses to eliminate wasted energy consumption.

Our JouleCOOL business model is pioneering servitization of the air conditioning industry. Under JouleCOOL, we sell chilled water to our clients at a fixed cost per ton of cooling they consume under long term contracts. Our clients save operating costs and modernize their facilities with industry-leading technologies without having to make any up-front investments.

Our JoulePAYS (Pay-As-You-Save) business model offers Hospitals a 15% guaranteed reduction in energy compared to their historical bills in return for a fixed share of their savings under long-term contracts. These savings are delivered by redesigning centralized cooling, hot water and steam systems, providing the highest efficiency equipment, and constantly monitoring and controlling their operations with our self-developed DeJoule technology.

Led by an MIT/Berkeley Alumnus, an award-winning engineer from the Indian Navy, and a financial wizard, our team of 100+ professionals has a comprehensive set of capabilities spanning project development, design, financing, execution, cutting-edge IOT technologies, analytics and operations.

We have delivered up to 70% energy savings to Hospitals, including the largest Hospital chains in India – Apollo, Fortis, Max, CARE, Aster, Aravind, KIMS and others, spanning more than 14 cities. We have won national and international recognition, including a top prize from the German Energy Ministry, multiple prizes in Ministry of Power’s National Energy Conservation Awards and CII’s National Energy Management Awards, and numerous other prizes and media mentions. In recognition of our innovative zeal, we were selected as a “Champion of Change” by the Prime Minister’s Office and Niti Aayog. Our CEO serves on the Executive Council of the leading non-profit organization focusing on energy efficiency in India – the Alliance for an Energy Efficient Economy (AEEE), and is a Co-Founder of the Sustainability Mafia – which aims to position India as the engine of the world’s sustainability solutions.

Our supporters and partners include Echoing Green, Harvard University, TATA Trusts, David & Lucile Packard Foundation, TATA Cleantech Capital, Yes Bank, World Bank, SIDBI, Tata



Power Delhi Distribution Limited (TPDDL), Kigali Cooling Efficiency Program, BASE, UPES, DIT, NIT Calicut, Model Engineering College and other prominent institutions across the globe.

We like to work hard and play hard. Inspired by MIT's motto "Mens et Manus", we believe in using our minds and hands to develop and utilize technology for practical application. If you are curious to learn more about us, visit our: [Website](#), [Facebook](#), [Twitter](#), [LinkedIn](#).

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