# Job Position: - Technical Lead - Digital Infrastructure

### About Arghyam

Arghyam is a charitable organization set up in 2005 with an endowment from Rohini Nilekani with the vision of Safe Sustainable Water for All. Over the last 18 years, Arghyam has supported Govt and civil society organizations in 140 projects in 22 states across the country in diverse areas of groundwater, springs, water quality and rural sanitation. The work and body of knowledge generated by partnerships has shaped policy narratives, launched national and state level programs while directly impacting the lives of over 6 million people. Arghyam also runs the India Water Portal, an open knowledge bank for the sector with over 8 million readers.

Climate change will primarily be felt by humanity through water. The impact of climate change on water resources will lead to reduced freshwater availability, alteration of rainfall patterns, rising sea levels and saltwater intrusion, degraded water quality, impact on sanitation & health resulting in huge socio-economic impacts. These will be felt primarily by the most poor and vulnerable population. There is an urgent need to work towards climate resilience with a focus on water, at scale.

**Arghyam's approach for achieving its vision is to work on strengthening government systems using technology to implement participatory water security programs at scale.**

There is an exciting opportunity to participate in affecting societal impact at scale! We are working on designing a unified, national technology infrastructure for the Government of India's National Jal Jeevan Mission. A Digital Public Infrastructure (DPI) approach with common registries, common standards and open interoperable, Application Programming Interfaces (APIs) will allow for innovation and choice of digital tools for states while allowing them to leverage the existing infrastructure and observability of on ground processes to all the stakeholders from the communities to the center.

### About the Position

Join us at Arghyam for a transformative opportunity that not only promises professional growth but also the chance to make a profound societal impact. As we embark on designing a unified, national technology infrastructure for the Government of India's National Jal Jeevan Mission, your role as a Technical Lead- Digital Infrastructure will be at the heart of pioneering a Digital Public Infrastructure (DPI). This initiative will revolutionize the way states choose, build and innovate digital tools for achieving the JJM vision of safe sustainable domestic water to all rural households across the country.

Positioned within the Ministry in Delhi, this role offers a rare chance to closely engage with government operations while driving a high-impact technology initiative forward. **You need to be a hands-on technology geek with proven experience in building large technology systems in microservices**

**architecture.** You will delve into the intricate task of analyzing existing systems, designing state-of-the-art services and APIs, building data registries and establishing critical standards and specifications. You will be working in collaboration with the Senior Manager - Digital Infrastructure & Government Relations. **Candidates in the project management and coordination role need not apply.**

Be at the forefront of a transformational journey that not only aims to do something meaningful for society but also offers an unparalleled learning experience in emerging technology domains. Embrace the opportunity to leave a lasting legacy on a national scale, shaping the future of digital infrastructure in India.

### Role of the Technical Lead - Digital Infrastructure

### Design API Specifications and Registries

- Understand existing digital systems and infrastructure comprehensively.
- Understand the core domain entities and registries that are needed to ensuring data integrity
- Work closely with stakeholders to identify the core services and registries.
- Create standard framework for the APIs
- Design interoperable APIs for the core services
- Define Data Registries and the APIs.
- Document API standards, registries and specifications for effective integration.

### Collaboration with JJM Technology and Functional Teams:

- Excited and passionate about working with the Government systems and teams.
- Provide technical support and guidance to the government's JJM technology and functional teams.
- Ensure alignment of technical solutions with the mission's objectives and stakeholder needs.

### Documentation and Communication:

- Document all technical designs, architectures, processes, standards and specifications.
- Prepare and present technical reports and updates to project stakeholders.
- Facilitate communication and collaboration between technical and non-technical stakeholders.

### Skills

The role involves working with ecosystem stakeholders to design APIs and registries and the candidate should possess a mix of technical and analytical skills.

- **Technical Skills**
  - API Development and Management:
  - Proficiency in designing, developing and managing APIs.

- ○ Understanding of API protocols, authentication and security best practices.
- **System Architecture and Design**
  - ○ Strong knowledge in system architecture and design principles.
  - ○ Experience in designing scalable and interoperable digital solutions.
  - ○ Understanding of data standards, privacy and security regulations.
- **Programming and Technology Stack**
  - ○ Proficiency in modern programming languages and technology stacks.
  - ○ Familiarity with cloud services, database management and web technologies.
- **Analytical and Problem-Solving Skills**
  - ○ Strong analytical skills to assess systems and identify areas for improvement.
  - ○ Ability to interpret and utilize data in decision-making.
  - ○ Proficiency in identifying challenges and developing effective solutions.
  - ○ Creativity and innovation in approaching technical problems.

## Qualifications

- 5-8 years of experience in a technical role, preferably in digital infrastructure, API development, or system architecture.
- Bachelor's or Master's degree in Computer Science, Information Technology, or a related field from a reputed university/ college.
- Strong knowledge in API development, system design, and data management.
- Proficient in modern programming languages and technology stacks.
- Excellent problem-solving, analytical, and technical skills.

*Join us in our mission to make a lasting impact on India's water security landscape. Your expertise and dedication will be pivotal in driving positive change and improving the lives of millions. If you are a dynamic leader committed to driving transformational change, we encourage you to apply for this role and be part of our journey towards a water-secure future for all.*

**Female candidates are strongly encouraged to apply.**

**Compensation:** Competitive and commensurate with experience and abilities.

**Location:** Delhi/ Kolkata

**Reporting:** Director- Digital Infrastructure and Government Partnerships

**Date of Application: We are reviewing applications on a rolling basis. The position will remain open till a suitable candidate is found.**

To apply for this post, please email your updated resume to**: jobs@arghyam.org** with a mandatory subject line "**Application for the post of Technical Lead - Digital Infrastructure"**