Smart Waste

simple, economical, and sustainable waste management through technology

Profile
www.banyannation.com
Industry: Recycling & Waste Management IoT
Founded: July 2013

Management
Mani Vajipey
Co-founder/CEO
Columbia-Berkeley MBA
Ex-Qualcomm

Raj Madangopal
Cofounder/COO
MS, Robotics
Ex-Engineering Lead, Motricity

Rashi Agrawal
Director (Partnerships)
Columbia MBA
Ex-Country Manager, IIX

Venkat Vaka
Director (Supply Chain)
MBA, IIM Ahmedabad
Ex-Sr. Manager, SKS Microfinance

Bhaskar Kokkiligadda
Tech Lead (Data Intelligence)
IIT Kanpur
Ex-Qualcomm/Microsoft/Oracle

Advisors
Kohlberg Kravis Roberts (KKR)
Closed Loop Fund, NYC
Govt. of Telangana

Investors
Jaideep Khanna, Artha Capital
CIIE, IIM Ahmedabad

Summary
Banyan Nation is an award winning new-age waste management company that is driving 'circular economy' recycling models through technology innovations at each touch point of the recycling and waste management value chain in India.

Banyan has two business units – Banyan Plastic Recycling and Banyan Data Intelligence Technologies. Banyan's plastic recycling is well known for its first of its kind initiatives in automotive 'Bumper to Bumper' recycling with Tata Motors, and Shampoo Bottle recycling with L'Oreal and Unilever.

Banyan's data intelligence platform for waste management is widely recognized as a pioneering solution to integrate informal recyclers, help cities manage waste more effectively by cutting costs and improving operational efficiencies.

Business Background
Mani and Raj quit their careers in the US and founded Banyan Nation in 2013 to solve India's garbage crisis. Banyan was incubated in Columbia Business School's flagship startup program – The Greenhouse Incubator and currently sits out of T-Hub, Hyderabad.

Awards
Featured Innovation, Rockefeller Foundation, CityXChange, 2018
Winner, Circular Economy Award, World Economic Forum, 2018
Winner, Intel and Dept. of Science & Technology Challenge 2.0, 2017
Winner, mBillionth South Asia, 2015

The Product
Banyan is revolutionizing waste management in India by building a smart waste management platform with a wide variety of data intelligence capabilities that offer value to all stakeholders.

Technology Stack
The product is built on open source technologies and libraries.
Core data warehouse - based on MongoDB and PostgreSQL.
Web API layer - built on Node.JS with TypeScript and Loopback 4.
Web frontend - built on Angular 6.
Android apps – built for offline-readiness on API 19.
Data analysis engine - built on various open source Python libraries.

Team Ethos

We are looking for engineers with a proven track record of

- Excellent programming, debugging and troubleshooting skills with strong focus on delivering high-quality testable code with near-perfect unit/integration test coverage.
- Passion for building high-performing, secure and scalable web platforms and strong sense of ownership of products/services built.
- Collaboration and teamwork to achieve timely product delivery.
- Hands-on experience with development, deployment and maintenance of large-scale live services in the enterprise/consumer space.
- Good understanding of Agile principles and simple design with good communication and presentation skills.

The Position

As 'Senior Software Engineer – Web API', you will

- Own design and development of REST API layer for *all* the platform's client modules.
    - You must have 5+ years of experience developing production-level REST API services, with at least 3+ years of experience developing production-level server-side Javascript or TypeScript code on a node.js backend.
    - You must have built secure, network-resilient and XSS-proof internet-facing REST API services with authentication and role-based authorization.
    - You must have experience with optimizing services for high availability using industry-standard practices.
    - You must have built OpenAPI/ODATA/GraphQL-compliant REST API services to allow single-record or bulk operations against PostgreSQL or MongoDB data warehouses using asynchronous, secure and robust data exchange interfaces with well-defined concurrency strategies.
    - You must have developed secure and robust validation techniques based on type, length and range restrictions for inbound data to ensure data fidelity using industry-standard data validation strategies for JSON data.
    - You must have experience with developing and maintaining versioned APIs to maintain backward(reverse) and forward compatibility.
- Research and ensure adherence to industry-standard best practices in web API interface design.
    - You must have developed production-level internet-facing services with a proven track record of delivering bug-free, crash-proof, XSS-proof, secure and performant Javascript/TypeScript code.
- Collaborate with other stakeholders to turn requirements into actionable design and development tasks and use your breadth of skills to participate and influence design discussions across the board.
    - You must have worked in small to medium-sized teams using Agile practices, with partial to complete ownership of REST API endpoints/services.
- Support and maintain the services in live deployment – proactively through telemetry and reactively to bug reports.
    - You must have experience with providing live and reactive developer support for deployed services, along with experience of monitoring telemetry and performance metrics using analytics and performance monitoring frameworks like CloudWatch, New Relic etc.

Please reach out to Banyan Nation at bkokkiligadda@banyannation.com if you are interested.