

Solutions Architect

Location: Bangalore, INDIA (On-site; Full-time)

To apply: Email your resume and cover letter to careers@boomitra.com.

Main Purpose

Responsible for designing and implementing scalable, integrated solutions, API development, and App delivery. This individual will collaborate with R&D, data engineering, and application development teams to create robust systems that align with Boomitra's mission of providing scalable solutions to address climate change through AI and remote sensing across the globe.

Responsibilities

Solution Architecture and Design

- Architect scalable and efficient cloud solutions using **AWS** services, enabling geospatial data processing, modeling, and app delivery.
- Design and optimize systems for integrating geospatial models, APIs, data pipelines, and user-facing applications.
- Architect and implement data pipelines to ingest, process, and analyze large datasets from various sources.
- Design and implement secure and efficient payment systems, including integration with payment gateways and fraud prevention mechanisms.
- Ensure seamless integration of APIs, and web/mobile applications.
- Design and optimize database schemas, including relational databases, **(PostgreSQL), NoSQL (DynamoDB) and Firebase**.
- Ensure the security and privacy of sensitive data and payment information.

Collaboration and Integration

- Work with geospatial data scientists to implement and optimize machine learning models, ensuring compatibility with real-world datasets and remote sensing tools.
- Partner with the data engineering team to build scalable pipelines for ingesting and transforming datasets.
- Collaborate with the application development team to integrate APIs with backend systems using **Node.js, TypeScript**, and databases such as **PostgreSQL, DynamoDB, and MongoDB**.
- Support the frontend team in creating smooth interfaces with tools like **ReactJS, Material UI, and Bootstrap**, ensuring seamless end-user experiences.
- Mentor and guide development teams, fostering a culture of innovation and excellence.
- Collaborate with cross-functional teams, including product managers, data scientists, and DevOps engineers with the use of **GitHub**.

Technology Leadership

- Evaluate and recommend advanced tools, frameworks, and practices for processing, analyzing, and visualizing geospatial data at scale.
- Expertise in designing and implementing scalable and distributed systems
- Establish best practices for **API design (RESTful, GraphQL)** and cloud infrastructure deployment on AWS and Google Cloud
- Architect and implement data pipelines to ingest, process, and analyze large datasets from various sources.
- Champion innovation by exploring new technologies in geospatial analysis, machine learning, and software development.
- Strong proficiency in **Python, Node.js, ReactJS, ReactNative, Redux, TypeScript** and **JavaScript**

- Deep understanding of database systems (**PostgreSQL, DynamoDB**)
- Strong problem-solving and analytical skills

Project Oversight and Management

- Translate business requirements into detailed technical solutions, ensuring scalability, reliability, and performance.
- Define technical standards, monitor development progress, and ensure timely project delivery.
- Mentor and guide engineering teams on architectural decisions and development best practices.
- Excellent communication and collaboration skills

Qualifications & Experience

- **Education:** Bachelor's or Master's degree in Computer Science, Computer Engineering, or a related field.
- **Experience:**
 - Minimum 4 years in solution architecture or a similar role, with overall experience of 8+ years.
 - Proven experience designing and implementing scalable systems involving geospatial data.
- **Technical Expertise:**
 - **Cloud Platforms:** Expertise in **AWS** services and architecture design. AWS Lambda, OpenSearch, AWS Cognito, AWS RDS, AWS EC2, AWS API gateway, Firebase, AWS CloudFormation.
 - **Data Engineering:** Strong experience with pipeline orchestration and spatial databases
 - **Programming Languages:** Strong skills in **Python**, with familiarity in data processing libraries like **Pandas** and **NumPy**, as well as machine learning frameworks
 - **App Development:** Working knowledge of **Node.js, ReactJS, ReactNative, Expo, TypeScript** and frontend frameworks like **Material UI, Bootstrap, and Tailwind CSS**.
 - **APIs:** Expertise designing **RESTful** and **GraphQL APIs** for scalable data sharing and system integration.
- **Preferred Skills**
 - Experience with spatial-temporal analysis and large-scale dataset modeling.
 - Background in designing **SDKs** for data handling.
 - Proficiency in implementing monitoring systems for pipelines and APIs.
- **Competencies**
 - **Problem-Solving:** Strong analytical skills to identify issues, evaluate solutions, and implement effective resolutions in geospatial projects.
 - **Attention to Detail:** Precision and accuracy in handling geospatial data and developing applications to ensure high-quality outcomes.
 - **Communication Skills:** Ability to clearly communicate complex technical concepts to non-technical stakeholders. Effective written and verbal communication skills for documentation, reports, and presentations.
 - **Teamwork and Collaboration:** Experience working in interdisciplinary teams, collaborating with other developers, data scientists, and domain experts. Ability to work well in a team environment and contribute to group objectives.
 - **Adaptability and Flexibility:** Willingness to learn and adapt to new technologies and methodologies in the fast-evolving field of geospatial development. Flexibility to handle changing project requirements and priorities.
 - **Project Management:** Ability to manage time effectively and handle multiple projects simultaneously. Skills in organizing tasks, setting priorities, and meeting deadlines.
 - **Critical Thinking:** Ability to evaluate complex problems, consider various perspectives, and make well-informed decisions.
 - **User-Centric Focus:** Understanding the needs and requirements of end-users to develop intuitive and user-friendly geospatial applications.

- **Curiosity and Continuous Learning:** Eagerness to stay updated with the latest trends, tools, and best practices in geospatial technology. Commitment to continuous professional development and self-improvement.

We Are

Are you interested in moving the needle on climate change? This is your chance to do that and work on what is likely the most efficient and scalable solution to climate change! We aim to reduce humanity's entire carbon footprint by 20% in the next 10 years! You will also have the chance to do exciting work at the forefront of satellite and AI technology, while solving major problems for our Fortune 500 clients, while working closely with the founders! We are funded and backed by top Fortune 500 companies who truly care about mitigating climate change at scale!

We Offer

- The opportunity to work in a growing global Climate Tech company that is moving the needle on climate change.
- Work in a growing global climate impact company with a real commitment to sustainability and fighting climate change while incentivizing small farmers of the world.
- Excellent team spirit, working within a large and international team of professionals passionate about environmental sustainability.
- You will be building and shaping a business from the start to scale-up.
- The opportunity to work with highly dedicated and motivated professional experts all around the world. We are focused on recruiting the best talent, where bright and passionate colleagues join in building a high performing cross-functional team.
- Salary is commensurate with experience and responsibilities.
- We offer a flexible schedule and a competitive benefits package including generous vacation days and personal time off.
- Support for personal development, diversification and continuous learning is a priority.
- Boomitra believes in a strong work-life balance and where possible we strive to match the needs of the business while accommodating the needs to the individual. As a global organization we actively strive to reflect the diversity in society. We therefore encourage all qualified applicants from all backgrounds to apply, and are committed to creating a work environment that fits gender equality and allows combining career progress with the needs of a family or other personal circumstances.

Boomitra is an equal opportunity employer. At Boomitra, we are committed to providing an environment of mutual respect where equal employment opportunities are available to all applicants and teammates without regard to race, color, religion, sex, national origin, age, marital status, military and veteran status, and any other characteristic protected by applicable law. We believe that diversity and inclusion among our teammates is critical to our success.

*Boomitra has been named as one of **TIME Magazine's 100 Most Influential Companies** in the world (2024). This list highlights companies making an extraordinary impact around the world. Last year HRH Prince William announced Boomitra as **The Earthshot Prize Winner** in the 'Fix Our Climate' category. These awards recognize and underpins Boomitra's work with farmers and ranchers to adopt regenerative land management practices that capture and store carbon in the soil, improve soil health, and increase agricultural yields. These practices also improve water quality and biodiversity, and provide farmers with additional income through carbon credits. Boomitra is on a mission to recarbonize the soil and protect the planet.*