

# Principal Software Engineering

Job ID  
REQ-10021408  
Sep 13, 2024  
USA

## Summary

Novartis Institutes for BioMedical Research (NIBR) is the global pharmaceutical research organization of Novartis. With approximately 6,000 scientists and physicians around the world, our research is focused on discovering innovative new drugs that will change the practice of medicine. We have an open and entrepreneurial culture, encouraging collaboration to make effective therapies.

## About the Role

### Purpose of the Role:

As an Architect in Software Engineering team within NIBR's 400-people strong Informatics organization (NX), you will be responsible for designing and developing a next generation of software tools. Working in a highly collaborative environment, you will partner with other architects, engineers, product managers, user researchers, data scientists and global discovery project teams to drive product innovation and launch new capabilities that enable scalable, secure and intuitive access to research data by NIBR's global scientific community.

### **Major Accountabilities (may include but not limited to):**

- Develop state-of-the-art software tools and methodologies to support the discovery process across the entire design-make-test-analyze cycle
- Play a lead role in the design and development of tools and technologies for integrating, processing, analyzing and visualizing data at scale
- Partner closely with users and cross-functional product teams to translate business needs into powerful, functional and beautiful products
- Provide consultancy around software tools and methodologies and suggest innovative ways to leverage internal and external data
- Write production quality code and offer assistance and expertise to your teammates while implementing your own ideas
- Participate in the full development cycle from product inception, research and prototyping to release in production
- Embrace and promote agile development principles and best practices for software development
- Demonstrate strong technical and thought leadership and ability to influence and guide the work of others

*This position will be located at the Cambridge, MA site and will not have the ability to be located remotely.*

The pay range for this position at commencement of employment is expected to be between \$136,800 and \$205,200 per year; however, while salary ranges are effective from 1/1/24 through 12/31/24, fluctuations in the

job market may necessitate adjustments to pay ranges during this period. Further, final pay determinations will depend on various factors, including, but not limited to geographical location, experience level, knowledge, skills and abilities. The total compensation package for this position may also include other elements, including a sign-on bonus, restricted stock units, and discretionary awards in addition to a full range of medical, financial, and/or other benefits (including 401(k) eligibility and various paid time off benefits, such as vacation, sick time, and parental leave), dependent on the position offered. Details of participation in these benefit plans will be provided if an employee receives an offer of employment. If hired, employee will be in an “at-will position” and the Company reserves the right to modify base salary (as well as any other discretionary payment or compensation program) at any time, including for reasons related to individual performance, Company or individual department/team performance, and market factors.

### **What will you bring to the role:**

- BS in computer science, information systems, life sciences or related field (advanced degree preferred) and at least 5 years of hands-on software development experience post BS (may include academic training)
- Extensive experience with modern programming languages (Java, Python, Javascript, Typescript ...), operating systems and software development environments
- Experience with installation & upgrade of vendor software on Windows & Linux validated environment
- Experience with Watson LIMS, SDMS, ELNs & GXP is a plus
- Experience with relational and non-relational databases (Postgres, Oracle, DynamoDB)
- Experience in web service development (e.g. Flask, NestJS) and with both REST and GraphQL service architectures
- Extensive experience building and deployment software in cloud environments (preferably AWS)
- Familiarity with containerization and virtualization technology, including the use of Docker and containers to modularize and deploy complex services and web applications
- Agile software delivery processes, focused on git and using “gitops” and “trunk-based deployment” approaches to software delivery and infrastructure-as-code
- Proven track record in delivering industry-grade software solutions with a focus on performance, quality and reliability
- Ability to design and deliver solutions proactively, independently and with minimal supervision
- Collaborative mindset and team spirit
- Well-structured working style with open and clear communication that enables effective collaboration across multiple teams, sites and time zones
- Strong customer focus and interpersonal skills
- Attention to detail and passion for the end-user experience

### **Preferred Experience:**

- Experience in life sciences and pharmaceutical R&D
- Experience in GXP & scientific applications like ELN, LIMS & data acquisition systems is a plus
- Experience with Azure or other non-AWS cloud platforms
- Working knowledge of OAuth2 for modern authentication / authorization
- Hands-on experience with cluster container deployment solutions (Kubernetes, AWS ECS)
- Experience with development processes, projects and repositories (e.g. JIRA, Bitbucket, Jenkins, CI/CD, Confluence)

### **Why Novartis?**

766 million lives were touched by Novartis medicines in 2021, and while we're proud of this, we know there is so much more we could do to help improve and extend people's lives.

We believe new insights, perspectives and ground-breaking solutions can be found at the intersection of medical science and digital innovation. That a diverse, equitable and inclusive environment inspires new ways of working.

We believe our potential can thrive and grow in an unbossed culture underpinned by integrity, curiosity and flexibility. And we can reinvent what's possible, when we collaborate with courage to aggressively and ambitiously tackle the world's toughest medical challenges. Because the greatest risk in life, is the risk of never trying!

Imagine what you could do here at Novartis!

#### Commitment to Diversity & Inclusion

Novartis is committed to building an outstanding, inclusive work environment and diverse teams representative of the patients and communities we serve.

**Accessibility and Reasonable Accommodations:** Individuals in need of a reasonable accommodation due to a medical condition or disability for any part of the application process, or to perform the essential functions of a position, please send an e-mail to [tas.nacomms@novartis.com](mailto:tas.nacomms@novartis.com) or call +1 (877)395-2339 and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

**Join our Novartis Network:** If this role is not suitable to your experience or career goals but you wish to stay connected to hear more about Novartis and our career opportunities, join the Novartis Network here: <https://talentnetwork.novartis.com/network>

**Why Novartis:** Helping people with disease and their families takes more than innovative science. It takes a community of smart, passionate people like you. Collaborating, supporting and inspiring each other. Combining to achieve breakthroughs that change patients' lives. Ready to create a brighter future together? <https://www.novartis.com/about/strategy/people-and-culture>

**Join our Novartis Network:** Not the right Novartis role for you? Sign up to our talent community to stay connected and learn about suitable career opportunities as soon as they come up: <https://talentnetwork.novartis.com/network>

**Benefits and Rewards:** Read our handbook to learn about all the ways we'll help you thrive personally and professionally: <https://www.novartis.com/careers/benefits-rewards>

#### **EEO Statement:**

The Novartis Group of Companies are Equal Opportunity Employers who are focused on building and advancing a culture of inclusion that values and celebrates individual differences, uniqueness, backgrounds and perspectives. We do not discriminate in recruitment, hiring, training, promotion or other employment practices for reasons of race, color, religion, sex, national origin, age, sexual orientation, gender identity or expression, marital or veteran status, disability, or any other legally protected status. We are committed to fostering a diverse and inclusive workplace that reflects the world around us and connects us to the patients, customers and communities we serve.

#### **Accessibility & Reasonable Accommodations**

The Novartis Group of Companies are committed to working with and providing reasonable accommodation to

individuals with disabilities. If, because of a medical condition or disability, you need a reasonable accommodation for any part of the application process, or to perform the essential functions of a position, please send an e-mail to [us.reasonableaccommodations@novartis.com](mailto:us.reasonableaccommodations@novartis.com) or call +1(877)395-2339 and let us know the nature of your request and your contact information. Please include the job requisition number in your message.

Division

Biomedical Research

Business Unit

Pharma Research

Location

USA

Site

Cambridge (USA)

Company / Legal Entity

U175 (FCRS = US175) Novartis Institutes for BioMedical Research, Inc.

Functional Area

Research & Development

Job Type

Full time

Employment Type

Regular

Shift Work

No

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