

Head of Data Engineering & Factory

Job ID
REQ-10079242

6月 01, 2026

USA

摘要

Job Title: Head of Data Engineering & Factory

#LI-Hybrid

Location: Cambridge, USA

Relocation Support: This role is based in Cambridge, USA. Novartis is unable to offer relocation support: please only apply if accessible.

Ready to shape how data powers scientific breakthroughs? As Head of Data Engineering & Factory, you will lead the vision and evolution of a cutting-edge Data Product Factory—transforming how scalable, artificial intelligence-ready data products are built, delivered, and consumed across Biomedical Research. This is a high-impact leadership role where you will combine deep technical expertise with strategic thinking to industrialize data engineering, accelerate innovation through automation and artificial intelligence, and enable a truly data-centric organization. You will work at the forefront of modern engineering practices, driving measurable outcomes while empowering teams to build reliable, high-quality data products at scale.

About the Role

Key Responsibilities

- Define and execute the vision, roadmap, and operating model for the Data Product Factory
- Lead industrialization of scalable, production-grade data product engineering across Biomedical Research domains
- Drive adoption of standardized engineering patterns, reusable blueprints, and contract-first design principles
- Ensure all data products are artificial intelligence-ready with standardized interfaces, metadata, and controlled access mechanisms
- Lead modernization of engineering practices using automation-first and artificial intelligence-native approaches
- Oversee end-to-end lifecycle of data products including build, certification, deployment, and deprecation
- Establish and scale continuous integration, continuous deployment, and development and operations capabilities across platforms
- Embed governance, security, lineage, and policy-as-code into engineering workflows by design
- Build and lead high-performing engineering teams, driving technical excellence and organizational capability growth
- Partner with domain and platform leaders to align business priorities with engineering delivery outcomes

Essential Requirements

- Over 10 years of experience in software engineering, platform architecture, or enterprise data infrastructure
- Proven track record building and scaling enterprise data platforms or productized data systems
- Strong experience leading engineering teams within complex, matrixed organizational environments
- Deep expertise in continuous integration, continuous deployment, and automated testing practices in production environments
- Demonstrated experience embedding governance, access control, lineage, and compliance within engineering workflows
- Experience enabling artificial intelligence use cases through well-designed data products, interfaces, and metadata frameworks
- Strong ability to apply automation and artificial intelligence to improve engineering productivity and operational efficiency
- Excellent communication and stakeholder management skills with proven experience influencing senior leadership

Desirable Requirements

- Experience designing agent-compatible interfaces, metadata frameworks, and retrieval-augmented data access patterns
- Proven success mentoring multidisciplinary engineering teams across platform, data, quality,

and artificial intelligence domains

The salary for this position is expected to range between 1,76,400.00 - 3,27,600.00 USD per year.

The final salary offered is determined based on factors such as relevant skills and experience, and will be reviewed periodically upon joining Novartis. Novartis may update the published salary range based on company and market factors.

Your compensation will include a performance-based cash incentive and, depending on the level of the role, eligibility for annual equity awards.

US-based eligible associates receive a comprehensive benefits package that includes health, life, and disability coverage, a 401(k) plan with company contribution and matching, and a range of additional benefits. Associates are also eligible for a generous time-off package, including vacation, personal days, holidays, and other leave options.

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>

Benefits and Rewards: Learn about all the ways we'll help you thrive personally and professionally. [Read our handbook \(PDF 30 MB\)](#)

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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 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.

部门

Biomedical Research

Business Unit

Research

地点

USA

状态

Massachusetts

站点

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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false, allowMutedAutoPlay: false, loop: false }, sources: { options: {}, startTime: 0 }, plugins: {},
sources: { options: {}, startTime: 0 }, ui: { showCCButton: false, settings: { showQualityMenu: true,
showSpeedMenu: false }, css: "/modules/custom/arcticnckalturaaddon/css/kalturavideo.css",
components: { fullscreen: { disableDoubleClick: false } }, uiComponents: [ { presets: ['Playback',
'Live'], area: 'BottomBarRightControls', replaceComponent: 'Fullscreen', get:
KalturaPlayer.ui.components.Remove } ] } }; // Check and add plugins only if they exist if
(KalturaPlayer.plugins["download"]) { config.plugins.download = { disable: true }; } if
(KalturaPlayer.plugins["transcript"]) { config.plugins["playkit-js-transcript"] = { position: "right", //
Default: bottom;('left', 'right', 'top', 'bottom') to enable transcript. expandMode: "over", // Default:
alongside;('alongside', 'hidden', 'over') expandOnFirstPlay: false, showTime: true, downloadDisabled:
false, printDisabled: false, disable: true }; } if (KalturaPlayer.plugins["preventSeek"]) {
config.plugins.preventSeek = { preventSeekForward: false, preventSeek: false }; }
config.plugins.floating = { disable: true }; if (KalturaPlayer.plugins["navigation"]) {
config.plugins.navigation = { position: "right", expandMode: "over", expandOnFirstPlay: false, visible:
false }; } if (KalturaPlayer.plugins["hotspots"]) { config.plugins['playkit-js-hotspots'] = { disable: true }; }
if (KalturaPlayer.plugins["moderation"]) { config.plugins['playkit-js-moderation'] = { disable: true }; } if
(KalturaPlayer.plugins["info"]) { config.plugins['playkit-js-info'] = { disable: true }; } if
(KalturaPlayer.plugins["share"]) { config.plugins.share = { disable: true }; } config.ui.uiComponents =
[]; if (KalturaPlayer.plugins["googleAnalytics"]) { config.plugins.googleTagManager = {};
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config.plugins.googleTagManager.containerId = 'GTM-57RJQ5';
config.plugins.googleTagManager.customEventsTracking.custom = [];
config.plugins.googleTagManager.customEventsTracking = { preset: { coreEvents: true, UIEvents:
false, playlistEvents: false, castEvents: false } }; }
```

```
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kalturaPlayerVideos !== 'undefined') { kalturaPlayerVideos.push(kalturaPlayer); } else { var
kalturaPlayerVideos = []; kalturaPlayerVideos.push(kalturaPlayer); } // Load the Player for other
media. kalturaPlayer.loadMedia({entryId: "1dgfvmafo"}); } catch (e) { console.error(e.message) }
```

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