

Director, Group Head (AI Systems & Scale)

Job ID
REQ-10078244

6月 03, 2026

USA

摘要

Job Title: Director & Group Head (AI Systems & Scale)

LinkedIn Tag: #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.

Novartis has embraced a bold strategy to drive a company-wide digital transformation. Our objective is to position Novartis as an industry leader by proactively adopting digital technologies that foster innovative approaches to hasten drug discovery and development. By utilizing both internal and external R&D data with the power of data science, predictive models, generative AI, and machine learning, our objective is to identify new targets, create more effective therapeutic molecules, better predict drug pharmacokinetics and safety risks, refine clinical trial design, and significantly shorten development cycles. The AI4R team leads Novartis Biomedical Research (BR) in exploring and applying advanced AI and ML methodologies to generate novel drug discovery insights, and to speed and improve drug discovery efficiency whilst focusing on patients' needs.

AI4R partners with drug discovery teams, raises the level of AI expertise across Biomedical Research

(BR) and ensures that BR science keeps up with the rapidly evolving ecosystem of AI technologies by connecting with AI leaders in academia and industry.

This is a leadership role for the AI Systems & Scale group within AI4R and will be tasked with strong technical and project leadership, critical assessment and specialized deployment of compute, data, model, code and agentic platforms for rapid enablement and adoption of AI approaches, algorithms, models and workflows to maximize impact on key domains areas of biomedical research that will potentially lead to developing better drugs, faster.

About the Role

Step into a leadership role shaping the future of AI at scale, where advanced agentic systems and enterprise AI platforms transform how biomedical research is delivered. As Director & Group Head (AI Systems & Scale), you will drive the design and deployment of next-generation AI systems, enabling scientists to seamlessly leverage data, models, and intelligent workflows to accelerate drug discovery. You will lead high-performing engineering teams, define scalable architectures, and ensure AI solutions are robust, governed, and impactful—bringing innovative therapies closer to patients faster.

Key Responsibilities

- Define and lead the multi-year roadmap for scalable AI systems, platforms, and agentic architectures across research.
- Lead and scale multidisciplinary teams delivering production-grade AI systems and intelligent applications.
- Establish reference architectures for agentic systems, including orchestration, retrieval, memory, and human-in-the-loop controls.
- Build and standardize enterprise agentic platforms with reusable components, workflows, and evaluation frameworks.
- Define and enforce machine learning operations and large language model operations standards across AI systems development.
- Own agent quality and safety engineering, including guardrails, policy enforcement, and failure detection mechanisms.
- Drive scalable deployment strategies, ensuring performance, reliability, cost efficiency, and multi-tenant architecture.
- Define performance metrics linking system effectiveness to scientific outcomes, including accuracy, robustness, and efficiency.
- Partner with data, security, and platform teams to ensure governance, compliance, and responsible data usage.
- Drive cross-functional collaboration and portfolio management to prioritize high-impact AI system initiatives and reduce duplication.

Essential Requirements

- Demonstrated experience leading machine learning capability development initiatives across

multiple drug discovery domains and teams.

- Strong experience applying machine learning across functional areas such as computational chemistry or protein modeling.
- Proven expertise in large model training, including high-performance computing, cloud environments, and distributed systems.
- Deep curiosity and passion for biomedical sciences and therapeutic discovery.
- Strong ability to explain complex machine learning concepts clearly to both technical and non-technical stakeholders.
- Minimum of 10+ years of experience in innovation, development, deployment, and support of machine learning solutions.
- Strong coding proficiency in Python and deep learning frameworks, with experience using version control systems.
- Proven ability to manage complexity, align stakeholders, and deliver results in matrixed environments.

Desirable Requirements

- Experience building enterprise-scale agentic platforms with orchestration, memory, and retrieval systems.
- Expertise in machine learning operations and large-scale model deployment with monitoring and drift detection.

Compensation and Benefits

Novartis Compensation and Benefit Summary

The salary for this position is expected to range between 1,94,600.00 - 3,61,400.00 USD Annual.

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. To learn more about the culture, rewards and benefits we offer our people [click here](#).

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 \(PDF 30 MB\)](#)

EEO Statement:

The Novartis Group of Companies are Equal Opportunity Employers. 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.

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

Information Technology

地点

USA

状态

Massachusetts

站点

Cambridge (USA)

Company / Legal Entity

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

Functional Area

Data and Digital

Job Type

Full time

Employment Type

Regular

Shift Work

No

```
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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 = {};
config.plugins.googleTagManager.customEventsTracking = {};
config.plugins.googleTagManager.containerId = 'GTM-57RJQ5';
config.plugins.googleTagManager.customEventsTracking.custom = [];
config.plugins.googleTagManager.customEventsTracking = { preset: { coreEvents: true, UIEvents:
false, playlistEvents: false, castEvents: false } }; }
```

```
try { var kalturaPlayer = KalturaPlayer.setup(config); // Add the player to the global array. if (typeof kalturaPlayerVideos !== 'undefined') { kalturaPlayerVideos.push(kalturaPlayer); } else { var kalturaPlayerVideos = []; kalturaPlayerVideos.push(kalturaPlayer); } // Load the Player for other media. kalturaPlayer.loadMedia({entryId: "1_dgfvmafo"}); } catch (e) { console.error(e.message) }
```

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