NOVARTIS

Executive Director, Semantic and Knowledge Engineering

Job ID
REQ-10086323
Aug 23, 2026
LOC_US

About the Role

Key Responsibilities:

- Define and execute the enterprise strategy for semantic technologies, knowledge engineering, and knowledge graph capabilities.
- Lead the development and governance of enterprise ontologies, taxonomies, business vocabularies, and semantic models that establish a shared understanding across the organization.
- Design and implement the enterprise semantic layer that enables trusted AI, consistent analytics, interoperability, and reusable business knowledge.
- Partner with Applied AI, Data Science, Product Management, Engineering, and Business teams to embed semantic capabilities into NovaOS products and AI solutions.
- Establish governance, metadata management, knowledge lifecycle processes, and quality standards for enterprise knowledge assets.
- Drive innovation in knowledge graphs, retrieval-augmented generation (RAG), semantic search, reasoning engines, and AI-enabled knowledge management.
- Build and lead a high-performing team of semantic engineers, ontology specialists, and knowledge engineers while fostering technical excellence and innovation.

Essential Requirements:

- Education: • Bachelor's or advanced degree in Computer Science, Information Science, Artificial Intelligence, Data Science, Bioinformatics, or a related discipline.
- 10+ years of experience in semantic technologies, knowledge engineering, enterprise architecture, data management, or AI platforms, including leadership experience.
- Deep expertise with ontologies, taxonomies, metadata, RDF/OWL, knowledge graphs, graph databases, semantic web technologies, and enterprise information architecture.
- Experience building enterprise semantic platforms that enable AI, analytics, search, and data interoperability at scale.
- Exceptional leadership, executive communication, and cross-functional stakeholder management skills.

Desirable Requirements:

- Experience applying semantic technologies to generative AI, agentic AI, RAG, and enterprise AI platforms.
- Experience in pharmaceutical, healthcare, or other highly regulated industries.

Novartis Compensation Summary:

The salary for this position is expected to range between $225,400 and $418,600 per year.

The final salary offered is determined based on factors like, but not limited to, relevant skills and experience, and upon joining Novartis will be reviewed periodically. Novartis may change 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 to be considered for annual equity awards.

US-based eligible employees will receive a comprehensive benefits package that includes health,life and disability benefits, a 401(k) with company contribution and match, and a variety of other benefits. In addition, employees are eligible for a generous time off package including vacation, personal days, holidays and other leaves.

Role Requirements

Division
DIV_IU
Business Unit
General Management
Location
LOC_US
Site
East Hanover
Company / Legal Entity
U014 (FCRS = US014) Novartis Pharmaceuticals Corporation
Alternative Location 1
LOC_US
Functional Area
FCT_DD
Job Type
Full time
Employment Type
Regular
Shift Work
No
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