Designation Scientist

Tentative Job Location : Chennai, India

Description:

Modeling & Simulation Engineer

Vantage is looking to recruit a talented and qualified Modeling & Simulation (M&S) Engineer, with an interest in applying Quantitative Systems Pharmacology (QSP) to Pharma and Biotech R&D. QSP aims to quantify and integrate multiple scales of physiological knowledge using mathematical models.

You will be part of an inter-disciplinary team of Modeling & Simulation experts that generate insights to support R&D decision-making in pharma, biotech and life sciences, to ultimately deliver novel drugs to patients.

The ideal M&S Engineer will combine the team's knowledge of biology & physiology with sound model development principles, using relevant computational tools to build custom QSP models tailored for client R&D requirements. Specifically, the M&S Engineer will

- Develop mathematical models of physiological systems to analyze dynamical behavior, quantify parameter sensitivities and understand system behavior, in order to derive analysis and insights that guide drug discovery and development decisions.
- Use literature research to make reasoned decisions on proper biological representation
- Develop process, tools and scripts to improve efficiency of workflows
- Communicates with client research team to identify need, strives to understand and define a complex research problem, and break it down into research flow
- Communicates effectively with team members and customers and leads the project in alignment with customer expectations

Ideal Skills/Education/Background include:

- A degree in Chemical Engineering, Applied Mathematics, Physics, Bioengineering, or related field providing a foundation in engineering of dynamical systems
- Master's/PhD degrees with relevant research experience is a plus
- Demonstrated experience working in Modeling & Simulation with proven ability to develop, validate and apply models for real world applications. Specifically, experience using Ordinary Differential Equations, Techniques of Non-Linear Dynamics, parameter optimization methods
- Experience in computational biology and/or modeling of biological systems is highly desirable
- Strong coding experience with relevant software/tools such as Matlab, R, Python, C/C++
- Experience with interpreting/analyzing quantitative information (especially clinical trial data, experimental data)
- Experience working on independent research projects, resulting in publications in high impact journals
- Communication skills are highly valued, including scientific writing, and more generally, articulation of complex technical subjects to multiple stakeholders
- Interest in biology is necessary. Exposure to biology/physiology is a major plus

	Program	AE BSBE	CE CHE	CSE	EE E	S ME	MSE	PHY	CHM	MTH	ECO	DES	IME	CGS	HSS	EEM	MSP	NET	PSE	Stats
	BT	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes													
Eligibilty :	BS				Ye	es		Yes	Yes	Yes	Yes									
	MT	Yes Yes	Yes Yes	Yes	Yes Ye	es Yes	Yes						Yes			Yes	Yes	Yes	Yes	
	DoubleMajor	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes									
	dual	Yes Yes	Yes Yes	Yes	Yes Ye	es Yes	Yes	Yes	Yes	Yes	Yes									
	dualB	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes			Yes		Yes	Yes	
	dualC	Yes Yes	Yes Yes	Yes	Yes Ye	es Yes														
	Mdes											Yes								
	MBA												Yes							
	Phd	Yes Yes	Yes Yes	Yes	Yes Ye	es Yes	Yes													
	MSc							Yes	Yes	Yes										Yes
	MSR	Yes Yes	Yes Yes	Yes	Yes	Yes	Yes							Yes					Yes	

Cost to 1000000 Company: **Package** 1000000 Details: Bond: **False CPI CutOff:** 0.0 Medical Requirments NO Resume False **Shortlist: Aptitude** False Test: Group False **Discussion: Technical** True Test:

Technical 60 min Test **Duration: Technical** True Interview: **Technical** N/A Interview **Duration:** Number of **Techincal** 0 Interview **Rounds:**

HR

Interview:

 $\begin{array}{c} \textbf{Additional} \\ \textbf{Information:} \end{array} \\ \textbf{Round 1: Online screening test (Technical) - 60 mins Round 2: Online written test (Technical) - 90 mins} \\ \end{array}$

False