JOB INFORMATION

Job Code	HA16
Job Description Title	Coord, Engineering Research Data & AI Development
Pay Grade	RE10
Range Minimum	$64,030
33rd %	$81,100
Range Midpoint	$89,640
67th %	$98,180
Range Maximum	$115,250
Exemption Status	Exempt
Organizational use restricted to the following divisions	128 Samuel Ginn Col of Engineering
Approved Date:	6/27/2025 3:49:05 PM

JOB FAMILY AND FUNCTION

Job Family:	Research
Job Function:	Disciplinary Research

JOB SUMMARY

The Coordinator, Research Data and AI Development plays a pivotal role in advancing the research capabilities of the College of Engineering by developing and implementing Artificial Intelligence (AI)-driven tools and data-centric solutions. This position supports strategic decision-making and fosters innovation, ensuring the College keeps pace with the rapid, exponential growth of its research enterprise. In collaboration with faculty, researchers, and leadership, the Coordinator leads efforts to design, optimize, and deploy cutting-edge AI applications that enhance research methodologies, streamline data management, and provide actionable insights for institutional advancement. The role involves overseeing data strategy, maintaining robust research infrastructure, and ensuring compliance with best practices in AI and data governance.

RESPONSIBILITIES

- Development and Coordination of AI-Driven Research Tools: Designs, develops, and maintains AI and machine learning tools to support faculty research, data analysis, and predictive modeling. Collaborates with faculty and research groups to prototype, refine, and scale AI applications that accelerate research productivity and innovation. Evaluates and integrates open-source and commercial AI platforms to optimize research methodologies and expand analytical capabilities. Develops custom dashboards, interactive visualizations, and automated reporting tools to enhance decision-making, performance tracking, and research impact assessments.

- Research Development, Impact, and Funding Support: Provides technical and strategic expertise to faculty on AI, big data, and analytics-driven research proposals, enhancing grant competitiveness. Assists in crafting and refining data management plans (DMPs) and AI methodology sections for grant applications to ensure compliance with funding agency standards. Applies advanced analytics, impact modeling, and dynamic visualization techniques to help research teams effectively showcase the societal, technological, and economic significance of their work. Identifies emerging AI research funding opportunities and supports faculty in aligning their proposals with evolving industry and academic trends.

- Research Data Infrastructure, Governance, and Compliance: Oversees secure, ethical, and compliant data management practices, ensuring adherence to institutional, legal, and funding agency requirements (e.g., GDPR, HIPAA, NSF, NIH). Develops and maintains robust, reproducible, and auditable data pipelines to ensure data integrity and accessibility for AI models and research analytics. Partners with Engineering Network Services, central IT, campus data governance, and research administration units to align research data security and governance strategies with institutional policies. Implements best practices for AI model transparency, explainability, and responsible AI deployment in research applications.

- Talent Development and Training: Designs and leads training sessions, workshops, and bootcamps on AI tools, data ethics, open science, reproducible research, and advanced research data management. Mentors students and researchers in AI-enhanced, data-driven methodologies to cultivate expertise in computational

RESPONSIBILITIES

research and analytics. Facilitates interdisciplinary collaboration to bridge AI technologies with diverse research fields, fostering innovation and cross-sector impact.

- Performs other duties as assigned.

SUPERVISORY RESPONSIBILITIES

Supervisory Responsibility	May be responsible for training, assisting or assigning tasks to others. May provide input to performance reviews of other employees.

MINIMUM QUALIFICATIONS

To be eligible, an individual must meet all minimum requirements which are representative of the knowledge, skills, and abilities typically expected to be successful in the role. For education and experience, minimum requirements are listed on the top row below. If substitutions are available, they will be listed on subsequent rows and may only to be utilized when the candidate does not meet the minimum requirements.

MINIMUM EDUCATION & EXPERIENCE

Education Level	Focus of Education		Years of Experience	Focus of Experience	
Master's Degree	Computer Science, Machine Learning/Artificial Intelligence and Data Science	and	5 years of	Experience using and developing ML/AI-based tools (e.g. large- and small-language models) and models for research and experience in data science and graph theory. Experience in user interfaces that enable non-experts to utilize the developed tools. Experience shows progressive increase in productivity and levels of responsibility.	Or
PhD	Computer Science, Machine Learning/Artificial Intelligence and Data Science	and	2 years of	Experience using and developing ML/AI-based tools (e.g. large- and small-language models) and models for research and experience in data science and graph theory. Experience in user interfaces that enable non-experts to utilize the developed tools. Experience shows progressive increase in productivity and levels of responsibility.	

MINIMUM KNOWLEDGE, SKILLS, & ABILITIES

Understanding of AI frameworks, neural networks, deep learning, NLP, and computer vision.	
Expertise in statistical modeling, predictive analytics, and big data methodologies.	
Familiarity with best practices for data collection, processing, storage, and sharing in academic research.	
Knowledge of funding agency requirements (NSF, NIH, etc.) and how to structure competitive grant proposals involving AI and big data.	
Understanding of regulations such as GDPR, HIPAA, and institutional policies on research data security.	
Knowledge of current, evolving AI technologies, research methodologies, and industry standards.	
Expertise in dashboards, interactive visualization, and automated reporting platforms.	
Proficiency in Python, R, TensorFlow, PyTorch, or similar AI/ML tools.	
Ability to work with SQL, NoSQL, or graph databases for research data storage and retrieval.	
Ability to assess research needs and develop tailored AI-driven solutions.	
Strong interpersonal skills to work effectively with faculty, researchers, and leadership.	
Capacity to anticipate emerging AI trends and integrate cutting-edge tools into research practices.	
Skill in bridging AI technologies with diverse research fields for transformative impact.	

MINIMUM LICENSES & CERTIFICATIONS

Licenses/Certifications	Licenses/Certification Details	Time Frame	Required/ Desired	
None Required.	Professional Engineer (PE)		Desired	

PHYSICAL DEMANDS & WORKING CONDITIONS

Physical Demands Category:	Healthcare & Safety

PHYSICAL DEMANDS

Physical Demand	Never	Rarely	Occasionally	Frequently	Constantly	Weight
Standing					X	
Walking					X	
Sitting				X		
Lifting			X			15 lbs
Climbing		X				
Stooping/ Kneeling/ Crouching				X		
Reaching				X		
Talking					X	
Hearing					X	
Repetitive Motions					X	
Eye/Hand/Foot Coordination					X	

WORKING ENVIRONMENT

Working Condition	Never	Rarely	Occasionally	Frequently	Constantly
Extreme temperatures		X			
Hazards		X			
Wet and/or humid		X			
Noise		X			
Chemical		X			
Dusts		X			
Poor ventilation		X			

Vision Requirements:

Ability to see information in print and/or electronically and distinguish colors.