



## **APPLY ONLINE**

### **Position Summary**

#### **Enterprise Programmer Analyst I**

##### **Purpose**

Be a part of a purpose-driven team that powers life-saving research and contributes to a collaborative, research environment. Work with cutting-edge data and AI (Artificial Intelligence) technologies. Design high-impact user interfaces that surface insights from machine learning models.

As an Enterprise Programmer Analyst I on our CIBMTR (Center for International Blood and Marrow Transplant Research) IT (Information Technology) Applications and Analytics team, collaborate with physician scientists, data managers, data analysts, statisticians, and data engineers to design and implement robust web-based applications, intelligent user interfaces, and data visualizations that provide access to vast collections of data to advance outcomes research. Configure and maintain business intelligence tools, dashboards, and AI-integrated portals that surface insights and predictions to researchers and other stakeholders through clear, intuitive interfaces.

This role bridges analytics engineering with modern UI/UX development, especially in the context of AI and machine learning products, expanding our team's capabilities to deliver next-generation, user-centric, data-driven applications.

##### **Primary Functions**

- Collaborate with stakeholders and IT team members to identify, analyze, document, and transform system and user requirements into AI-enhanced technical solutions.
- Design, develop, and maintain web-based applications and portals that support both traditional data analytics and AI-powered features.
- Create engaging and accessible interfaces for AI outputs, such as predictive scores, risk models, and natural language summaries.
- Build and support visualizations and dashboards using BI and analytics tools (e.g. QlikView, Looker) and modern frameworks that integrate AI-driven recommendations.
- Develop and refine front-end portal components that present insights from large data sets, machine learning pipelines, and advanced statistical models.
- Apply user-centered design principles to develop intuitive interfaces for researchers, clinicians, and analysts interacting with AI models or decision-support tools.
- Perform user research and usability testing to guide interface designs for AI model transparency, interpretability, and trust.
- Integrate disparate data sources and ensure alignment between backend data pipelines and front-end AI experiences.
- Document systems, data flows, model interactions, and front-end designs clearly and consistently.
- Provide technical support and training for BI tools and AI-enhanced platforms and participate in Agile development processes.
- Perform other work-related duties as assigned.



## **Knowledge – Skills – Abilities**

Knowledge of computers, electronics, digital media, databases, applications, software development, risk management, and information security.

### **Required Skills**

- Minimum 5 years of experience with SQL-based development and data transformation
- Strong proficiency in UI and UX design and development.
- Strong proficiency in BI tools (e.g., QlikView, Qlik Sense, Power BI, AWS QuickSight)
- Proven experience building front-end applications and dashboards that incorporate complex data and user interaction
- Proficiency in modern web technologies: HTML, CSS, JavaScript, and modern front-end frameworks (e.g., React, Angular, Vue)
- Experience with full software development lifecycle and Agile methodologies
- Strong communication, collaboration, and problem-solving skills
- Administers and optimizes role-based access control (RBAC) security frameworks in alignment with organizational policies and compliance requirements

### **Preferred Skills**

- Experience developing user interfaces for data-intensive or AI-powered applications
- Understanding of the principles of AI model interpretability, transparency, and human-centered AI
- Experience designing and testing UI/UX for AI applications (e.g., predictive models, classification tools, generative AI)
- Familiarity with UI prototyping tools (e.g., Figma, Sketch, Adobe XD)
- Knowledge of user-centered design, usability testing, and accessibility best practices (e.g., WCAG)
- Experience integrating outputs from ML frameworks or APIs into user-facing products
- Familiarity with Python-based AI/ML toolkits (e.g., scikit-learn, TensorFlow, Hugging Face)
- Familiarity with REST APIs and JSON data structures
- Experience with Git or other version control systems
- Domain experience in healthcare or life sciences
- Experience visualizing model outputs (e.g., SHAP values, probability scores, uncertainty)
- Understanding of R or SAS scripting for data analysis and statistical modeling
- Knowledge of ethical AI and bias mitigation strategies in user interfaces

### **Organizational Structure**

Building: Center for Cancer Discovery

Department: CIBMTR (Center for International Blood and Marrow Transplant Research)

Division:

Reports to (Title): Data Solutions Architect

Direct Reports (Titles): None.

Collaborates with (Titles): CIBMTR IT staff, CIBMTR Scientific Directors, CIBMTR Data Operations Staff, Statisticians, Transplant Center Data Managers, research partners, and vendors.



### **Specifications**

*Appropriate education and/or experience may be substituted on equivalent basis*

Minimum Required Education: Bachelor's Degree

Minimum Required Experience: 5 years

Preferred Education:

Preferred Experience: 7 years

Field:

Certification:

### **Classification**

Grade Name 17

Full-Time Equivalent 1.0

FLSA Status Exempt

FLSA Test Computer Professional

Workweek Full-time with expectations for coverage during core business hours and flexibility required as necessary to accommodate business needs.

Job ID 299

Job Name Programmer

Position Category Information Services

### **Job Scope**

*Complexity* – requires sound judgment; leads difficult and involved planning of initiatives

*Impact* – errors may result in extensive damage; constant attention to accuracy required

*Autonomy* – individual responsible for completion of work; seeks supervision as appropriate

*Communication* – involved in frequent conflict resolution; communicates with senior leaders

*Responsibility* – influences others

*Confidentiality* – confidential information used frequently to make decisions

*Leadership* – prioritizes work of others or may provide supervision

### **Physical Requirements**

Work requires occasionally lifting moderate weight materials, standing, or walking continuously.

### **Risk Potential**

Infrequent exposure to hazards such as dust, fumes, or extreme temperatures, airborne or blood borne pathogens, extreme temperatures, or allergens.

### **Sensory Acuity**

Ability to detect and translate speech or other communication required. May occasionally require the ability to distinguish colors and perceive relative distances between objects.

### **Work Environment**

Occasional exposure to dust, noise, temperature changes, or contact with water or other liquids. Work is performed in an environmentally controlled environment.



## **Performance Dimensions**

### **Collegiality**

Exhibit confidentiality, honesty, and actions that build trust and strengthen relationships. Listen to others and effectively communicate in a clear and concise manner through written and verbal communication. Demonstrate respect and commitment to the values of diversity and equity; seek out and incorporate diverse perspectives into decision making.

### **Excellence and Creativity**

Exhibit initiative and ingenuity by taking ownership of tasks to proactively improve services, avoid problems, or develop opportunities. Generate novel and valuable ideas to impact institutional missions. Identify and implement new methods to increase efficiency and quality.

### **Education and Development**

Displays an ongoing commitment to continuous learning and self-improvement in one's area of responsibility. Actively seek out mentorship and learning opportunities that can be applied to current and future work activities. Develop and maintain professional affiliations. Participate in design, development, and/or evaluation of instructional materials, methods, courses, or programs.

### **Agility and Judgment**

Remain flexible and versatile in rapidly changing environment and adapt quickly to changing circumstances. Change behavioral style or method of approach when necessary to achieve a goal. Make timely and sound decisions based on analysis of information, experience, and logic. Show reliability and accountability in the successful completion of all work.

### **Stewardship and Institutional Citizenship**

Support transformational change to achieve institutional vision and strategies. Be an active and thoughtful participant in institutional initiatives, meetings, and committee work. Conserve resources and use in an efficient and cost-effective manner across all institutional missions. Look for ways to improve and promote quality within area of influence.

## **Disclaimers**

### **Background Check**

Employment in this position may be contingent upon successfully completing a background and criminal history check, caregiver background check in accordance with the Wisconsin Caregiver Background Check Law, physical examination, and / or driving record check.

### **Equal Opportunity Employer**

The Medical College of Wisconsin is an affirmative action / equal opportunity employer and does not discriminate in hiring or employment on the basis of age, sex, race, color, religion, national origin, veteran status, disability, or sexual orientation.

**Diversity and Inclusion**

The Medical College of Wisconsin defines diversity as a commitment to recognizing and appreciating the variety of individual differences in an environment that promotes and celebrates individual and collective achievement. The diversity of MCW continues to be an important source of innovative ideas and creative accomplishments.

**Confidentiality**

Employees that have access to MCW, affiliate, subsidiary, or student data or Protected Health Information (PI), or research protected information are obligated to protect the confidentiality and proper use and access of this information in order to prevent loss, misuse, unauthorized access, unnecessary identification, or security breaches.

**Completeness**

This job description is not an employment contract and the Medical College of Wisconsin may modify this document at any time. This document is intended to indicate the types of tasks and levels of skill, effort, and responsibility required by positions assigned this title. This information shall not be construed as a declaration of the specific duties and responsibilities of any particular position. It is not intended to limit or modify the right of any supervisor to assign, direct, and control the work of direct reports. The functions described are not to be interpreted as exclusive or all-inclusive of the various functions performed.