***This old UMB job description was created between 2000 and 2014 and is being provided as a template or guide in the preparation of a current job description. The essential functions are general in nature and may not accurately depict the duties of a specific unit. Managers are encourage to update and provide specific duties that are applicable to work being performed in the unit.***

Job Title: **IT Bioinformatics Software Engineer, II**

Job Family: Information Technology Sub Family: IT - Applications - Bioinformatics

**Job Summary:**

With minimal supervision of senior engineers develop and maintain software that drives, interacts with, or extracts data from complex engineered systems, such as genomic sequencing systems. Contribute to projects intended to develop software or design database to accomplish specific scientific or analytical objective. Develop tools, protocols or structured methods for organizing or presenting data from analytical or diagnostic systems.

**Essential Functions:**

* Independently develop and maintain software based on the requirements specified by lead engineers, senior engineers and scientists.
* Develop and maintain analysis pipelines using the tools and systems available at Institute of Genome Science (IGS). This will include installing software and writing wrapper scripts to invoke the software to process data.
* Participate in multiple ongoing projects simultaneously and work as a member of a large-scale, multi-member project team.
* Manage genomics related data generated and maintained at IGS including loading and querying data from database systems, writing scripts to transform the data to necessary formats, and downloading and transforming genomic data maintained in public data repositories.
* Ensures basic quality assurance of data and software generated by IGS.
* Performs other duties as assigned.

**Minimum Qualifications**

Education: Bachelors in Bioinformatics, Computer Science, Computer Engineering or related field.

Experience: Two (2) years of experience in bioinformatics tool use, software development, or analysis of biological data

Supervisory:

Licensure/Certification:

Other: No subsitution of experience for minimum education requirement.

**Knowledge, Skills, and Abilities**

*Managers may provide prefered knowledge, skills, and abilities as necessary.*

Job Code: E0764F

SOC Code: 151132 IPEDS: Computer

EEO6 Code: Professional State Code: 9749505

USM eCode: E40077 AAP Code: 3A