

<b>Job Framework</b>	The structure consisting of job functions, families, series, grade levels, and salary ranges that provides a strong foundation to describe the different kinds of work undertaken at the University. Within the framework there are the following categories that roll up into the framework.
<b>Job Function</b>	A collection of similar, related Job Families that are represented at the University (e.g.: HR, Finance, R&D, IT)
<b>Job Family</b>	A grouping of similar, related jobs within a Job Function. (e.g.: IT Security, CI).
<b>Job Series</b>	A grouping of similar, related jobs within a Job Family that have similar tasks and focus, each requiring different skill levels and varying responsibilities. (e.g.: Systems Professional)
<b>Job Matrix</b>	A visual representation of a Job Series.
<b>Job</b>	A grouping of similar, related tasks and responsibilities performed by one or more individuals. (e.g.: IT Security roles and Identity and Access Management roles)
<b>Job Description</b>	An accurate summary of the work performed by the job including the core duties, qualifications and skill level.
<b>Job Code</b>	An alphanumeric character identifier that corresponds to a particular standard job description for the purpose of mapping the job to our information systems.
<b>Job Title</b>	Label for job code, which Subject Matter Experts will help to name. (e.g.: Systems Professional I, II, III)
<b>Business Title</b>	The “working” title, determined locally based on school/unit hierarchy. (e.g.: System Admin, System Engineer, ...)

**Grades: differentiating roles**

Grade 1: 1s do. At a basic level. Entry level doer.

Grade 2: 2s do at a more advanced level. More complex work, expected to independently identify and resolve problems.

Grade 3: 3s are expert doers—design, develop, small-m manage (not people, necessarily, but projects, teams, programs)

Grade 4: 4s are technical leads or entry managers—top tier talent, more collaborative, big-picture focused, has a broad view multiple CI tracks in mind.

Grade 5: 5s are technical experts or senior managers—set the direction for the future of the unit, way less emphasis on doing and more on leading collaborations and directing strategy

Grade 6: 6s are entry level directors - manage multiple teams and with some control of investments

Grade 7: 7s are senior directors - take full responsibility for strategy, professional staff and CI investments

Grade 8: 8s have one of the pinnacle responsibilities at their institution, which encapsulates CI with a overlap of other strategic functions within the institution.

**Job Function:** Information Technology / Research Technology  
**Job Family:** Cyberinfrastructure / Research Computing / Research IT \*\*\*  
**Job Series Role:** CI Systems Professional

<b>Business Title(s): (e.g. Systems Admin)</b>	<b>Business Title(s): (e.g. Systems Engineer)</b>	<b>Business Title(s): (e.g. Sr. Systems Engineer)</b>	<b>Business Title(s): (e.g. Lead Engineer)</b>	<b>Business Title(s): (e.g. Principal Architect)</b>
<b>Job Title:</b> Systems Professional I	<b>Job Title:</b> Systems Professional II	<b>Job Title:</b> Systems Professional III	<b>Job Title:</b> Systems Professional IV	<b>Job Title:</b> Systems Professional V
<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>
<b>Grade Level:</b> 1 Exemption: Exempt	<b>Grade Level:</b> 2 Exemption: Exempt	<b>Grade Level:</b> 3 Exemption: Exempt	<b>Grade Level:</b> 4 Exemption: Exempt	<b>Grade Level:</b> 5 Exemption: Exempt
<b>Effective/Revision Date:</b> April 2019	<b>Effective/Revision Date:</b> April 2019	<b>Effective/Revision Date:</b> April 2019	<b>Effective/Revision Date:</b> April 2019	<b>Effective/Revision Date:</b> April 2019
<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>
Conduct advanced cyberinfrastructure administration duties. Operating CI solutions to keep up with the pace of complex research problems. Takes direction from senior staff to operate, monitor, and maintain the integrity of a broad scope of CI systems (storage, cluster computing, databases, virtual machines, network...). Provide feedback to teams and projects along side of research programs.	Assist in planning and conduct advanced cyberinfrastructure engineering duties. Implement CI solutions to keep up with the pace of complex research problems. Works with senior staff to build, monitor, and maintain the integrity of CI systems. Provide technical insight to teams, projects along side of research programs. Will become a key contributor to multiple projects simultaneously.	Coordinate the planning of and conduct advanced cyberinfrastructure engineering duties. Implement current and develop new CI solutions to keep up with the pace of complex research problems. Works independently to build, monitor, and maintain the integrity of CI systems. Provide technical expertise to teams, projects along side of research programs. Will be a key contributor to multiple projects simultaneously.	Lead the planning of and conduct advanced cyberinfrastructure engineering duties. Develop new CI solutions to keep up with the pace of complex research problems. Develop enhancements of monitoring to maintain the integrity of CI systems. Lead cross-functional technical teams, projects along side of research programs. Will lead multiple technical projects simultaneously.	Provides expertise and cross-organizational guidance in one or more advanced cyberinfrastructure systems. Develop next generation CI architectures to keep up with the pace of next generation of compute and/or data intensive research problems. Develop enhancements to maintain the integrity of CI systems at leading edge of current technology. Lead cross-functional technical teams, projects along side of research programs across institutional boundaries.
<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>
<b>Operations:</b> - Participate in running CI systems at scale - Monitor and maintain the health and integrity of CI systems including upgrading and patching <b>Development:</b> - Track performance metrics to ensure efficient current and future use of IT resources <b>Partnership/Collaboration:</b> - Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners - Builds and maintains relationships across the various CI teams to support researchers needs in a timely manner <b>Documentation/Training:</b> - Continue building a diverse set of systems administrative skills - Regularly review best practices documentation and refine both internal processes	<b>Operations:</b> - Participate fully in building, configuring and running CI systems at scale - Monitor and maintain the health and integrity of CI systems including upgrading and patching <b>Development:</b> - Assist in implementing robust and secure IT solutions within a fast paced research environment - Assist in defining and tracking performance metrics to ensure efficient current and future use of IT resources <b>Partnership/Collaboration:</b> - Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner - Builds and maintains relationships with external vendor technicians and engineers <b>Documentation/Training:</b> - Regularly contribute best practices documentation and knowledge transfer - May mentor junior staff	<b>Operations:</b> - Participate fully in planning, building, configuring and running CI systems at scale - Monitor and maintain the health and integrity of CI systems including upgrading and patching <b>Development:</b> - Design and implement robust and secure IT solutions within a fast paced research environment - Define and track performance metrics to ensure efficient current and future use of IT resources <b>Partnership/Collaboration:</b> - Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner - Builds and maintains relationships with external vendor technicians and engineers - Collaborates with other Systems Engineers within the CI ecosystem <b>Documentation/Training:</b> - Regularly contribute best practices documentation and knowledge transfer - Will mentor junior staff	<b>Operations:</b> - Lead the planning, building, configuration of CI systems at scale - Sets the standards of monitoring and maintaining the health and integrity of CI systems including upgrading and patching <b>Development:</b> - Design and implement robust and secure IT solutions within a fast paced research environment, including systems that meet regulated data compliant standards. - Define and track performance metrics to ensure efficient current and future use of IT resources <b>Partnership/Collaboration:</b> - Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner - Builds and maintains relationships with external vendor technicians and engineers - Collaborates and may provide leadership with other Systems Engineers within the CI ecosystem <b>Documentation/Training:</b> - Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals - Will lead trainings on specific areas of CI systems engineering	<b>Operations:</b> - Provide expert operational knowledge in the configuration, testing, and debugging of CI systems at scale that provides performance improvements of complex environments <b>Development:</b> - Develop next generation CI architectures to keep up with the pace of next generational compute and/or data-intensive research problems - Develop enhancements to maintain the integrity of CI systems at the leading edge of current technology <b>Partnership/Collaboration:</b> - Collaborate with domain researchers regularly and other key IT (e.g. network and security) to ensure CI solutions are being created to meet future needs - Leads and participates with Systems Engineers within the national CI ecosystem <b>Documentation/Training:</b> - Regularly present and publish in peer reviewed technical or domain specific journals and conferences - Will lead trainings on specific areas of CI systems engineering or domain research
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
- Minimum of 2 years' relevant post-secondary education OR relevant work experience including a combination of these two	- Minimum of 5 years' relevant post-secondary education OR relevant work experience including a combination of these two	- Minimum of 7 years' relevant post-secondary education OR relevant work experience including a combination of these two	- Minimum of 9 years' relevant post-secondary education or relevant work experience including a combination of these two	- Minimum of 11 years' relevant post-secondary education or relevant work experience including a combination of these two
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>
- Knowledge of Linux systems administration	- Broad knowledge of the deployment and management of CI systems (e.g. storage, cluster computing, network, database, virtualized systems) - Demonstrated team performance skills, service mindset approach, and the ability to act as a trusted advisor	- Broad knowledge of the deployment and management of CI systems (e.g. storage, cluster computing, network, database, virtualized systems) - Demonstrated team performance skills, service mindset approach, and the ability to act as a trusted advisor - Specialized knowledge in a specific technology	- Broad knowledge of the deployment and management of CI systems (e.g. storage, cluster computing, network, database, virtualized systems) - Demonstrated team performance skills, service mindset approach, and the ability to act as a trusted advisor - Specialized knowledge in a specific technology - Ability to lead the development of a specific technology	- Broad knowledge of the deployment and management of CI systems (e.g. storage, cluster computing, network, database, virtualized systems) - Demonstrated team performance skills, service mindset approach, and the ability to act as a trusted advisor - Extensive knowledge in a specific technology - Ability to lead the development of a specific technology

<b>Business Title(s): (e.g. Systems Manager)</b>	<b>Business Title(s): (e.g. Sr Systems Manager, Director of CI Systems)</b>
<b>Job Title:</b> Systems Manager IV	<b>Job Title:</b> Systems Manager V
<b>Job Code:</b>	<b>Job Code:</b>
<b>Grade Level:</b> 4 Exemption: Exempt	<b>Grade Level:</b> 5 Exemption: Exempt
<b>Effective/Revision Date:</b> April 2019	<b>Effective/Revision Date:</b> April 2019
<b>Job Summary</b>	<b>Job Summary</b>
Manage, recruit, and retain a team of systems professionals. Help make strategic decisions around the deployment of and investments in CI solutions to keep up with the pace of complex research problems. Set the strategy around monitoring and maintaining the integrity of CI systems. Participate in cross-functional management teams, projects. Establish partnerships with other IT and Data Center management.	Manage, recruit, and retain multiple teams of systems professionals. Make strategic decisions around the deployment of and investments in CI solutions to keep up with the pace of complex research problems. Set the strategy around monitoring and maintaining the integrity of CI systems. Participate in cross-functional management teams, projects along side of research programs. Regularly engage with IT and Research Leadership across the institution.
<b>Core Duties</b>	<b>Core Duties</b>
<b>Operations:</b> - Help make strategic decisions around the deployment of CI solutions - Set the strategy around monitoring and maintaining the health and integrity of CI systems including upgrading and patching <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional team of individual contributors - Recruit and develop a team of systems professionals that can keep up with the pace of researchers needs - Manage team resources, time and projects. - Help setting the budget for the maintenance and operational costs and future CI investments <b>Partnership/Collaboration:</b> - Manage the relationship with key IT (e.g. network and security) and Data Center partners to enable CI systems deployments in the a timely manner - Builds and maintains relationships with external technology vendors and acts as liaison to technology providers for researchers - Maintains relationship with internal purchasing, finance, shipping & receiving. <b>Documentation/Training:</b> - Regularly review process and procedure for systems management that must meet regulated data compliant standards - Will promote trainings in broad area of CI systems engineering to keep team skills current	<b>Operations:</b> - Make strategic decisions around the deployment of CI solutions - Set the strategy around monitoring and maintaining the health and integrity of CI systems including upgrading and patching <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional teams of individual contributors and/or managers - Recruit and develop a team of systems professionals that can keep up with the pace of researchers needs - Manage multiple team resources, time and projects. -Set the budget for the maintenance and operational costs and future CI investments <b>Partnership/Collaboration:</b> - Manage the relationship with key IT (e.g. network and security) and Data Center partners to enable CI systems deployments in the a timely manner - Builds and maintains relationships with external technology vendors and acts as liaison to technology providers for researchers - Maintains relationship with internal purchasing, finance, shipping & receiving. <b>Documentation/Training:</b> - Regularly review process and procedure for systems management for systems that must meet regulated data compliant standards - Will promote trainings in broad area of CI systems engineering to keep team skills current
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
- Minimum of 9 years' relevant post-secondary education OR relevant work experience including a combination of these two - Equivalent of 2 years mentoring or project management	- Minimum of 11 years' relevant post-secondary education OR relevant work experience including a combination of these two. - Two years formally managing a full-time staff
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>

**Job Function:** Information Technology / Research Technology  
**Job Family:** Cyberinfrastructure / Research Computing / Research IT \*\*\*  
**Job Series Role:** CI Facilitation Professional / Research Education and Facilitation (REF)

Business Title(s): (e.g. CI Support Specialist) Job Title: Facilitation Professional I	Business Title(s): (e.g. CI Facilitator, CI Consultant) Job Title: Facilitation Professional II	Business Title(s): (e.g. Sr. CI Facilitator (REF), Sr. CI Consultant) Job Title: Facilitation Professional III	Business Title(s): (e.g. Lead CI Facilitator, Lead Scientist) Job Title: Facilitation Professional IV	Business Title(s): (e.g. Principal CI Facilitator, Principal Scientist) Job Title: Facilitation Professional V
<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>
<b>Grade Level: 1 Exemption: Exempt</b>	<b>Grade Level: 2 Exemption: Exempt</b>	<b>Grade Level: 3 Exemption: Exempt</b>	<b>Grade Level: 4 Exemption: Exempt</b>	<b>Grade Level: 5 Exemption: Exempt</b>
<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>
<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>
Assist researchers in the onboarding of state-of-the-art CI systems, tools, and software to enable research productivity.	Engage researchers in the use of a broad set of state-of-the-art CI systems, tools, and software to enable research productivity. Partner with researchers to co-create and co-learn relevant computing and data capabilities	Advise researchers in the best use of a broad set of state-of-the-art CI systems, tools, and software to enable research productivity. Partner with researchers to co-create and co-learn research activities and relevant advanced computing and data capabilities both locally and nationally	Lead a team of researchers in the best use of a broad set of state-of-the-art CI systems, tools, and software to enhance research productivity. Partner with researchers to co-create and co-learn research activities and relevant advanced computing and data capabilities both locally and nationally. May use research knowledge to be a liaison for science domains. Will lead multiple projects simultaneously.	Provides expertise and cross-organizational guidance within a team of researchers and CI Professionals in the best use of a broad set of state-of-the-art CI systems, tools, and software to take research to the next level. Partner with researchers to co-create and co-learn research activities and relevant advanced computing and data capabilities both locally and nationally. Regularly use research knowledge to be a liaison for science domain. Will lead multiple projects simultaneously.
<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>
<b>Researcher Engagement:</b> - Regularly assist a broad set of researchers through support requests (i.e. email, ticketing systems, chats). - Help with routine issues in using CI systems. <b>Solutions Development:</b> - Provide the onboarding of state-of-the-art CI systems, tools, and software to enable research productivity. - Occasionally provide solutions to researchers that facilitate and/or enables research. <b>Partnership/Collaboration:</b> - Connect and coordinate the interactions between researchers and technology providers <b>Documentation/Training:</b> - Help review and test training material	<b>Researcher Engagement:</b> - Regularly engage a broad set of researchers through support requests (i.e. email, ticketing systems, chats) and in person consultations during office hours. <b>Solutions Development:</b> - Help facilitate the design and debugging of research workflows along side researchers. <b>Partnership/Collaboration:</b> - Connect and coordinate interactions between researchers and technology providers - Provide regular communications to the systems and software/data professionals. <b>Documentation/Training:</b> - Enhance learning with full awareness of the local research computing and data landscape - Helps build curriculum and teach trainings for basic use of CI for researchers.	<b>Researcher Engagement:</b> - Regularly advise a broad set of researchers through support requests (i.e. email, ticketing systems, chats) and in person consultations during office hours. - Build deep understanding with specific research activities through regular engagements. <b>Solutions Development:</b> - Facilitate the design, debugging, and automating/scripting of complex research workflows along side researchers. <b>Partnership/Collaboration:</b> - Connect and coordinate interactions between researchers and technology providers - Provide regular communications to the systems and software/data professionals. <b>Documentation/Training:</b> - Enhance learning with full awareness of the local and larger research computing and data landscape - Build advanced curriculum and teach workshops for researchers to maximize their use of CI for researchers.	<b>Researcher Engagement:</b> - Regularly lead the facilitation and education efforts for researchers in the board use large-scale computing and data services. - May use research knowledge to be a liaison for science domain. - Provides in-depth consultation with researchers through regular engagements <b>Solutions Development:</b> - Develop enhancements to workflows by having a deep understanding of current technology, software and tools. <b>Partnership/Collaboration:</b> - Lead cross-functional technical teams, projects along side of research programs. - Provide regular communications to the researchers and technology providers local and external. <b>Documentation/Training:</b> - Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals - Will lead trainings on specific areas of science domain & technology, software or tools.	<b>Researcher Engagement:</b> - Provide expert knowledge and cross-organizational guidance to researchers in the board use of large-scale computing and data services. - Regularly use research knowledge to be a liaison for science domains. <b>Solutions Development:</b> - Develop next-generation workflows or debug complex issues by having a deep understanding of future technology, software and tools. <b>Partnership/Collaboration:</b> - Build cross-functional technical teams, projects along side of research programs. - Provide regular communications to the researchers and technology providers both local and external. <b>Documentation/Training:</b> - Regularly present and publish in peer reviewed technical or domain specific journals and conferences - Will lead trainings on specific areas of science domain & technology, software or tools.
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
- Minimum of 2 years' relevant post-secondary education or relevant work experience including a combination of these two	- Minimum of 5 years' relevant post-secondary education or relevant work experience including a combination of these two	- Minimum of bachelor's degree and 3 years' and relevant work experience	- Minimum of masters degree and 3 years of relevant work experience or doctorate and 1 year of relevant work experience	- Minimum of masters degree and 5 years of relevant work experience OR doctorate degree and 3 years of relevant work experience
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>

Business Title(s): (e.g. Facilitation Manager) Job Title: Facilitation Manager IV	Business Title(s): (e.g. Sr Facilitation Manager, Director of CI Facilitation) Job Title: Facilitation Manager V
<b>Job Code:</b>	<b>Job Code:</b>
<b>Grade Level: 4 Exemption: Exempt</b>	<b>Grade Level: 5 Exemption: Exempt</b>
<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>
<b>Job Summary</b>	<b>Job Summary</b>
Manage, recruit, and retain a team of facilitation professionals. Help make strategic decisions around the facilitation and education investments to keep up with the pace of complex research problems. Set the strategy around engaging with faculty research groups. Participate in cross-functional management teams, projects. Establish partnerships with other academic and library technology groups.	Manage, recruit, and retain teams of facilitation professionals. Make strategic decisions around the facilitation and education investments to keep up with the pace of complex research problems. Set the strategy around engaging with faculty research groups and partnering on grants. Participate in cross-functional management teams, projects. Regularly engage with other Academic, Library, and Research leadership.
<b>Core Duties</b>	<b>Core Duties</b>
<b>Researcher Engagement:</b> - Regularly lead the facilitation and education efforts for researchers in the board use large-scale computing and data services. - May use research knowledge to be a liaison for science domain. <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional team of individual contributors - Recruit and develop a team of facilitation professionals that can keep up with the pace of researchers needs - Manage team resources, time and projects. - Help setting the budget for the maintenance and operational costs and future CI investments <b>Partnership/Collaboration:</b> - Builds and maintain the relationship with faculty researchers and technical leads - Establish partnerships with other academic and library technology groups. <b>Documentation/Training:</b> - Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals - Remain current in larger landscape of trainings on specific areas of science domain & technology, software or tools. - Will promote trainings for staff in broad area of large-scale computing and data services.	<b>Researcher Engagement:</b> - Provide expert knowledge to researchers in the board use of large-scale computing and data services. - Regularly use research knowledge to be a liaison for science domain. <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional team of individual contributors - Recruit and develop a team of facilitation professionals that can keep up with the pace of researchers needs - Manage team resources, time and projects. - Help setting the budget for the maintenance and operational costs and future CI investments <b>Partnership/Collaboration:</b> - Builds and maintain the relationship with faculty researchers and technical leads and participates in funding opportunities - Regularly engage with other Academic, Library and Research leadership. <b>Documentation/Training:</b> - Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals - Remain current in larger landscape of trainings on specific areas of science domain & technology, software or tools. - Will promote trainings for staff in broad area of large-scale computing and data services.
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
- Minimum of masters degree and 3 years of relevant work experience OR doctorate and 1 year of relevant work experience - Equivalent of 2 years mentoring or project management	- Minimum of masters degree and 5 years of relevant work experience OR doctorate degree and 3 years of relevant work experience - Two years formally managing a full-time staff
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>

**Job Function:** Information Technology / Research Technology  
**Job Family:** Cyberinfrastructure / Research Computing / Research IT \*\*\*  
**Job Series Role:** CI Software/Data Professional

Business Title(s): (e.g. RSE Apprentice, Assistant Data Scientist)	Business Title(s): (e.g. Research Software Engineer (RSE), Data Scientist)	Business Title(s): (e.g. Sr. RSE, Sr. Data Scientist)	Business Title(s): (e.g. Lead RSE, Lead Data Scientist)	Business Title(s): (e.g. Principal RSE, Principal Data Scientist)
Job Title: Software/Data Professional I	Job Title: Software/Data Professional II	Job Title: Software/Data Professional III	Job Title: Software/Data Professional IV	Job Title: Software/Data Professional V
Job Code:	Job Code:	Job Code:	Job Code:	Job Code:
Grade Level: 1 Exemption: Exempt	Grade Level: 2 Exemption: Exempt	Grade Level: 3 Exemption: Exempt	Grade Level: 4 Exemption: Exempt	Grade Level: 5 Exemption: Exempt
Effective/Revision Date: April 2019	Effective/Revision Date: April 2019	Effective/Revision Date: April 2019	Effective/Revision Date: April 2019	Effective/Revision Date: April 2019
Job Summary	Job Summary	Job Summary	Job Summary	Job Summary
Help maintain well-engineered software that supports and enriches research productivity and reliability. Evolve software development and data services with the research to ensure that modern standards of reproducible code are kept.	Implement well-engineered software that supports and enriches research productivity and reliability. Evolve software development and data services with the research to ensure that modern standards of reproducible code are kept.	Design, plan, and implement well-engineered software and data services that supports and enriches research productivity and reliability. Evolve software development and data services with the research to ensure that modern standards of reproducible research are kept.	Lead a team of software/data professionals and researchers in the design, plan, and implement well-engineered software and data services that enriches research productivity and reliability. Evolve software development and data services with the research to ensure that modern standards of reproducible research are kept. May use research knowledge to be a liaison for science domain. Will lead multiple projects simultaneously.	Provides expertise and cross-organizational guidance within a team of software/data professionals and researchers in the design, plan, and implement well-engineered software and data services that enriches research productivity and reliability. Evolve software development and data services with the research to ensure that modern standards of reproducible research are kept. Regularly use research knowledge to be a liaison for science domain. Will lead multiple projects simultaneously.
<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>
<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Learn from developer meetings with researchers how to design, plan, and implement well-engineered software that enriches research productivity and reliability.</li> <li>- Begin to build an understanding of research activities through regular engagements.</li> </ul> <p><b>Software Development:</b></p> <ul style="list-style-type: none"> <li>- Follow a scope of work, project plan, working on and track the progress of small number of milestones at a time</li> <li>- Maintain aspects of the version controlled software code and custom data processing pipelines for complex environments</li> <li>- Grow skills in a specific technology to develop custom solutions to meet researchers needs.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Work in a team of developers and researchers in collaboration with systems professionals.</li> <li>- Provide regular communications to project leads with updates.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Maintain internal code design and development guides for future contributors.</li> <li>- Learn to teach workshops for researchers on sustainable software and data management practices</li> </ul>	<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Regularly engage researchers in the design, plan, and implement well-engineered software that enriches research productivity and reliability.</li> <li>- Build understanding with research activities through regular engagements.</li> </ul> <p><b>Software Development:</b></p> <ul style="list-style-type: none"> <li>- Provide feedback on scope of work and project plan and track progress of regular milestones</li> <li>- Build and maintain aspects of version controlled software code and custom data processing pipelines for complex environments</li> <li>- Apply firm understanding of specific technology in develop custom solutions to meet researchers needs.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Work in a team of developers and researchers in collaboration with systems professionals.</li> <li>- Provide regular communications to project leads with updates.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Build internal code design and development guides for future contributors.</li> <li>- Teach workshops for researchers on sustainable software and data management practices</li> </ul>	<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Regularly advise researchers in the design, planning, and implementation of well-engineered software or data analysis that enriches research productivity and reliability.</li> <li>- Build deep understanding with specific research activities through regular engagements.</li> </ul> <p><b>Software Development:</b></p> <ul style="list-style-type: none"> <li>- Using project management techniques, develop a scope of work and timely project plan with regular milestones</li> <li>- Build and maintain version controlled software code and custom data processing pipelines for complex environments</li> <li>- Apply firm understanding of numerical methods or data analysis in develop custom solutions to meet researchers needs.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Work in a team of developers and researchers in collaboration with systems professionals.</li> <li>- Provide regular communications to PIs/stakeholders with project updates.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Build internal code design and development guides for future contributors.</li> <li>- Build advanced curriculum and teach workshops for researchers on sustainable software and data management practices that preserve the reproducibility of their research domain.</li> </ul>	<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Lead the design, planning, and implementation of well-engineered software or data analysis that enriches research productivity and reliability.</li> <li>- Build deep understanding with specific research activities through regular engagements.</li> </ul> <p><b>Software Development:</b></p> <ul style="list-style-type: none"> <li>- Using project management techniques, lead the development of multifaceted scope of work and timely project plan with regular milestones</li> <li>- Build and maintain version controlled software code and custom data processing pipelines with deep understanding of current technology, software and tools.</li> <li>- Builds upon specific research knowledge to develop custom solutions to meet researchers needs.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Lead a team of developers and researchers in collaboration with systems professionals.</li> <li>- Provide regular communications on large-scale project updates to internal and external PIs/stakeholders.</li> <li>- May contribute to the development of software/data service project communities beyond local institution for the purpose of sustainability.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Set the standards for internal code design and development guides.</li> <li>- Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals regarding sustainable software and data management practices.</li> </ul>	<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Provide expert knowledge in the design, planning, and implementation of well-engineered software or data analysis that enriches research productivity and reliability.</li> <li>- Build deep understanding with specific research activities through regular engagements.</li> </ul> <p><b>Software Development:</b></p> <ul style="list-style-type: none"> <li>- Using project management techniques, provide expert development knowledge and experience for multifaceted scope of work and timely project plan with regular milestones</li> <li>- Build and maintain version controlled software code and custom data processing pipelines for next-generation large-scale computing and data analytics environments</li> <li>- Builds upon specific research knowledge to develop custom solutions to meet researchers needs.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Build a team of expert developers and researchers in collaboration with systems professionals within a larger ecosystem</li> <li>- Provide regular communications on large-scale project updates to internal and external PIs/stakeholders.</li> <li>- Regularly contribute to the development of software/data service project communities beyond local institution for the purpose of sustainability.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Set the standards for internal code design and development guides.</li> <li>- Regularly present and publish in peer reviewed technical or domain specific journals and conferences regarding sustainable software and data management practices</li> </ul>
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
<ul style="list-style-type: none"> <li>- Minimum of 2 years' relevant post-secondary education or relevant work experience including a combination of these two</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum of 5 years' relevant post-secondary education or relevant work experience including a combination of these two</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum of bachelor's degree and 3 years' and relevant work experience OR 7 years' relevant work experience.</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum of masters degree and 3 years of relevant work experience OR doctorate and 1 year of relevant work experience</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum of masters degree and 5 years of relevant work experience OR doctorate degree and 3 years of relevant work experience</li> </ul>
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>
		<p><i>Example: Knowledge of batch processing, configuration management, and cloud orchestration techniques are essential. Well versed in software best practices, continuous integration and containerized solutions. Competency in high and low-level programming languages (C/C++, FORTRAN, python, R, ...) is essential along with basic management of large software systems and relational database architectures. Creating streamlined user interfaces for research design and visualization for research output are necessary. Superior communication skills coupled with an ability to navigate an academic environment and work collaboratively with individuals at all levels is key.</i></p>		
<b>Business Title(s): (e.g. RSE Manager, Manager of Data Science)</b>	<b>Business Title(s): (e.g. Sr RSE Manager, Director of Data Science)</b>			
<b>Job Title: Facilitation Manager IV</b>	<b>Job Title: Facilitation Manager V</b>			
<b>Job Code:</b>	<b>Job Code:</b>			
<b>Grade Level: 4 Exemption: Exempt</b>	<b>Grade Level: 5 Exemption: Exempt</b>			
<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>			
<b>Job Summary</b>	<b>Job Summary</b>			
Manage, recruit, and retain a team of software/data professionals. Help make strategic decisions around the investments in sustainable software engineering and data services to keep up with the pace of complex research problems. Set the strategy around engaging with faculty research groups. Participate in cross-functional management teams, projects. Establish partnerships with other academic and library technology groups.	Manage, recruit, and retain a teams of software/data professionals. Make strategic decisions around the investments in sustainable software engineering and data services to keep up with the pace of complex research problems. Set the strategy around engaging with faculty research groups and partnering on grants. Participate in cross-functional management teams, projects. Regularly engage with other Academic, Library, and Research leadership.			
<b>Core Duties</b>	<b>Core Duties</b>			
<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Lead the design, planning, and implementation of well-engineered software or data analysis that enriches research productivity and reliability.</li> <li>- Build deep understanding with specific research activities through regular engagements.</li> </ul> <p><b>Management:</b></p> <ul style="list-style-type: none"> <li>- Define and track employee performance metrics to ensure a highly functional team of individual contributors</li> <li>- Recruit and develop a team of software/data professionals that can keep up with the pace of researchers needs</li> <li>- Manage team resources, time and projects.</li> <li>- Help setting the budget for the maintenance and development costs of future software/data services</li> <li>- Builds and maintain the relationship with faculty researchers and technical leads</li> <li>- Establish partnerships with other academic and library technology groups.</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Builds and maintain the relationship with faculty researchers and technical leads and participates in funding opportunities</li> <li>- Regularly engage with other academic and library technology groups.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Set the standards for internal code design and development guides.</li> <li>- Regularly contribute best practices documentation, present at conferences, or publish in peer reviewed journals</li> <li>- Remain current in larger landscape of software development and data management practices within specific areas of science domain &amp; technology.</li> <li>- Will promote trainings for staff in broad area of software engineering and data services.</li> </ul>	<p><b>Technical Consultation:</b></p> <ul style="list-style-type: none"> <li>- Provide expert knowledge in the design, planning, and implementation of well-engineered software or data analysis that enriches research productivity and reliability.</li> <li>- Build deep understanding with specific research activities through regular engagements.</li> </ul> <p><b>Management:</b></p> <ul style="list-style-type: none"> <li>- Define and track employee performance metrics to ensure a highly functional team of individual contributors</li> <li>- Recruit and develop a team of facilitation professionals that can keep up with the pace of researchers needs</li> <li>- Manage team resources, time and projects.</li> <li>- Help setting the budget for the maintenance and operational costs and future CI investments</li> </ul> <p><b>Partnership/Collaboration:</b></p> <ul style="list-style-type: none"> <li>- Builds and maintain the relationship with faculty researchers and technical leads and participates in funding opportunities</li> <li>- Regularly engage with other Academic, Library and Research leadership.</li> </ul> <p><b>Documentation/Training:</b></p> <ul style="list-style-type: none"> <li>- Set the standards for internal code design and development guides.</li> <li>- Regularly present and publish in peer reviewed technical or domain specific journals and conferences regarding sustainable software and data management practices that preserve the reproducibility of their research domain.</li> <li>- Remain current in larger landscape of software development and data management practices within specific areas of science domain &amp; technology.</li> <li>- Will promote trainings for staff in broad area of large-scale computing and data services.</li> </ul>			
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>			
<ul style="list-style-type: none"> <li>- Minimum of masters degree and 3 years of relevant work experience or doctorate and 1 year of relevant work experience</li> <li>- Equivalent of 2 years mentoring or project management</li> </ul>	<ul style="list-style-type: none"> <li>- Minimum of masters degree and 5 years of relevant work experience OR doctorate degree and 3 years of relevant work experience</li> <li>- Two years formerly managing a full-time staff</li> </ul>			
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>			

**Job Function:** Information Technology / Research Technology  
**Job Family:** Cyberinfrastructure / Research Computing / Research IT \*\*\*  
**Role/Level:** CI Leader

Business Title(s): (e.g. Associate Director)	Business Title(s): (e.g. Director)	Business Title(s): (e.g. Managing Director, AVP of CI)
<b>Job Title: CI Leader I</b>	<b>Job Title: CI Leader II</b>	<b>Job Title: CI Leader III</b>
<b>Job Code:</b>	<b>Job Code:</b>	<b>Job Code:</b>
<b>Grade Level: 5 Exemption: Exempt</b>	<b>Grade Level: 6 Exemption: Exempt</b>	<b>Grade Level: 7 Exemption: Exempt</b>
<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>	<b>Effective/Revision Date: April 2019</b>
<b>Job Summary</b>	<b>Job Summary</b>	<b>Job Summary</b>
Help direct, recruit, and retain a team of CI Managers and/or Leads. Help sets the mission, vision and strategy for CI services and near-term investments. Builds and maintain relationships with various stakeholders. Regularly engages with other technical leads in Academic, Library, and Research on shared services and aligning near-term investments.	Direct, recruit, and retain a team of CI Leaders. Sets the mission, vision and strategy for CI services and investments. Builds and maintain relationships with various stakeholders. Regularly engages with other Academic, Library, and Research leadership on institutional-wide strategy and near-term investments.	Provides oversight in directing, recruiting, and retaining a team of CI Leaders. Develop the strategy and lead institutional collaborative CI services or programs. Builds and maintain relationships with various stakeholders. A penicale position that regularly engages with other Academic, Library, and Research senior leadership on institutional-wide strategy and long-term investments.
<b>Core Duties</b>	<b>Core Duties</b>	<b>Core Duties</b>
<b>Leadership:</b> - Help develop mission, vision and strategy for local CI services - Focus on near-term operational effectiveness and sustainability on one or more local CI services - Continue to engage in efforts towards the professionalization of CI (i.e. research computing and data services) to reinforce the need for advanced cyberinfrastructure on a national scale. <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional team of managers and/or leads - Recruit and develop a team of CI Leaders that can keep up with the pace of researchers needs - Manage team resources, time and projects. - Project budget and request for funding for the CI investments. <b>Partnership/Collaboration:</b> - Build and maintain the relationship with various stakeholders (professors, researchers, staff, government agencies, vendors) - Build and maintain the relationship with institutional governance board - Regularly engage with other technology leads in Academic, Library and Research. <b>Communications/Reports:</b> - Regularly provide reports to stakeholders metrics regarding usage, growth, and changes to CI services under your purview - Help define and track return on investment	<b>Leadership:</b> - Develop mission, vision and strategy for local CI services - Focus on near-term operational effectiveness and sustainability on multiple CI services institutional-wide - Help lead efforts towards the professionalization of CI (i.e. research computing and data services) to reinforce the need for advanced cyberinfrastructure on a national scale. - Ensure sustainability of resources by forming competitive partnerships for funding opportunities and effectively collaborating with other institutions. <b>Management:</b> - Define and track employee performance metrics to ensure a highly functional team of managers - Recruit and develop a team of CI Leaders that can keep up with the pace of researchers needs - Manage team resources, time and projects. - Project budget and request for funding for the CI investments. <b>Partnership/Collaboration:</b> - Build and maintain the relationship with various stakeholders (professors, researchers, staff, government agencies, vendors) - Build and maintain the relationship with institutional governance board - Regularly engage with other Academic, Library and Research leadership on institutional-wide strategy and investments. <b>Communications/Reports:</b> - Regularly provide reports to stakeholders metrics regarding usage, growth, and changes to CI services - Define and track return on investment	<b>Leadership:</b> - Responsible for achieving goals related to the mission, vision and strategy for institutional collaborative CI services - Set the strategic direction for operational effectiveness and long-term sustainability on multiple CI services across one or more institutions - Provide leadership in efforts towards the professionalization of CI (i.e. research computing and data services) to reinforce the need for advanced cyberinfrastructure on a national scale. - Ensure sustainability of resources by forming competitive partnerships for funding opportunities and effectively collaborating with other institutions. <b>Management:</b> - Recruit and develop a team of CI Leaders that can keep up with the pace of researchers needs - May manage large-scale projects across institutional boarders - Project budget changes to future investments in CI professionals, maintenance & operational costs. <b>Partnership/Collaboration:</b> - Build and maintain the relationship with various stakeholders (professors, researchers, staff, government agencies, vendors) - Develop and maintain the relationship with institutional governance board - Regularly engage with other AVPs leadership of Academic, Library and Research on institutional-wide strategy and investments. <b>Communications/Reports:</b> - Regularly provide reports to stakeholders regarding usage, growth, and changes to CI services
<b>Basic Qualifications</b>	<b>Basic Qualifications</b>	<b>Basic Qualifications</b>
- Minimum of 11 years' relevant post-secondary education or relevant work experience including a combination of these two. - Two years demonstrated leadership	- Minimum of 13 years' relevant post-secondary education or relevant work experience including a combination of these two. - 4 years of demonstrated leadership experience	- Minimum of 15 years' relevant post-secondary education or relevant work experience including a combination of these two. - 6 years of demonstrated leadership experience - Successful record of increasing responsibilities
<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>	<b>Additional Qualifications and Skills</b>
- Preferred education/academic experience masters degree and 5 years of relevant work experience or doctorate and 3 year of relevant work experience - Proven record of engaging with academic researchers	- Preferred education/academic experience masters degree and 7 years of relevant work experience or doctorate and 5 year of relevant work experience - Proven record of engaging with academic researchers	- Preferred education/academic experience masters degree and 9 years of relevant work experience or doctorate and 5 year of relevant work experience - Proven record of engaging with academic researchers