

Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Systems Facing – Professional	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Systems Professional II		Job Title: IT RC Systems Professional III	
Job Code: I1056P		Job Code: I1057P	
Grade Level: 56 Exemption: Exempt		Grade Level: 57 Exemption: Exempt	
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Independently conduct advanced research computing administration duties. Implement and maintain RC solutions to keep up with the pace of complex research problems. Take direction from senior staff/faculty to operate, monitor, and maintain the integrity of a broad scope of RC systems (storage, cluster computing, databases, virtual machines, network). Provide feedback to teams and projects alongside research programs.		Assist in planning and independently conduct advanced research computing engineering duties. Implement and maintain RC solutions to keep up with the pace of complex research problems. Work with senior staff/faculty to build, monitor, and maintain the integrity of RC systems. Provide technical insight to teams and projects alongside research programs. Become a key contributor to multiple projects simultaneously.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> • Participate in running RC systems at scale • Monitor and maintain the health and integrity of RC systems including upgrading and patching • Troubleshoot and manage escalations • Track performance metrics to ensure efficient current and future use of IT resources • Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner • Build and maintain relationships across the various RC teams to support researchers' needs • Build a diverse set of systems administrative skills • Review best practices documentation and refine both internal processes • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> • Participate fully in building, configuring and running RC systems at scale • Monitor and maintain the health and integrity of RC systems including upgrading and patching • 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 • Support and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner • Build and maintain relationships with external vendor technicians and engineers • Contribute best practices documentation and knowledge transfer • May mentor junior staff • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
		<ul style="list-style-type: none"> • Participate fully in planning, building, configuring and running RC systems at scale • Monitor and maintain the health and integrity of RC systems including upgrading and patching • 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 • Consult to and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner • Build and maintain relationships with external vendor technicians and engineers • Collaborate with other systems engineers within the RC ecosystem • Contribute best practices documentation and knowledge transfer • Mentor junior staff • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of two years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of five years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of seven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
<ul style="list-style-type: none"> Knowledge of systems administration 	<ul style="list-style-type: none"> Broad knowledge of the deployment and management of RC 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 	<ul style="list-style-type: none"> Broad knowledge of the deployment and management of RC 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
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours

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Job Title: IT RC Systems Professional V	Job Title: IT RC Systems Professional VI
Job Code: I1059P	Job Code: I1060P
Grade Level: 59 Exemption: Exempt	Grade Level: 60 Exemption: Exempt
Effective/Revision Date: December 2019	Effective/Revision Date: December 2019
Job Summary	
<p>Lead the planning of and conduct advanced research computing engineering duties. Develop new RC solutions to keep up with the pace of complex research problems. Develop enhancements of monitoring to maintain the integrity of RC systems. Lead cross-functional technical teams and projects alongside research programs. Lead multiple technical projects simultaneously.</p>	<p>Provide expertise and cross-organizational guidance in one or more advanced research computing systems. Develop next generation RC architectures to keep up with the pace of the next generation of computing and/or data intensive research problems. Develop enhancements to maintain the integrity of RC systems at leading edge of current technology. Make strategic decisions and lead cross-functional technical teams and projects alongside research programs across institutional boundaries.</p>
Typical Core Duties	
<ul style="list-style-type: none"> • Lead the planning, building, and configuration of RC systems at scale • Set standards for monitoring and maintaining the health and integrity of RC systems including upgrading and patching • 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 • Consult to and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner • Build and maintain relationships with external vendor technicians and engineers • Collaborate and may provide leadership with other systems engineers within the RC ecosystem • Contribute best practices documentation, present at conferences, or publish in peer reviewed journals • Lead trainings on specific areas of RC systems engineering • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	<ul style="list-style-type: none"> • Provide expert operational knowledge in the configuration, testing, and debugging of RC systems at scale that provides performance improvements of complex environments • Develop next generation RC architectures to keep up with the pace of next generational computing and/or data-intensive research problems • Develop enhancements to maintain the integrity of RC systems at the leading edge of current technology • Collaborate with domain researchers and other key IT (e.g. network and security) to ensure RC solutions are created to meet future needs • Lead collaborations and participate with systems engineers within the national RC ecosystem • Present and publish in peer reviewed technical or domain specific journals and conferences • Lead trainings on specific areas of RC systems engineering or domain research • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct

Job Family Matrix

Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of nine years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of eleven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills
<ul style="list-style-type: none"> Broad knowledge of the deployment and management of RC 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 	<ul style="list-style-type: none"> Broad knowledge of the deployment and management of RC 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
Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements
Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Systems Facing – Management	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Systems Mgt IV		Job Title: IT RC Systems Mgt V	
Job Code: I1058M		Job Code: I1059M	
Grade Level: 58 Exemption: Exempt		Grade Level: 59 Exemption: Exempt	
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Coordinate the planning of and conduct advanced research computing engineering duties. Implement current and develop new RC solutions to keep up with the pace of complex research problems. Work independently to build, monitor, and maintain the integrity of RC systems. Provide technical expertise to teams and projects alongside research programs. Be a key contributor to multiple projects simultaneously.		Actively contribute to strategic decisions regarding the deployment of and investments in RC solutions to keep up with the pace of complex research problems. Set strategy for monitoring and maintaining the integrity of RC systems. Participate in cross-functional management teams and projects. Establish partnerships with other IT and Data Center management.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> • Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment • Participate fully in planning, building, configuring and running RC systems at scale • Monitor and maintain the health and integrity of RC systems including upgrading and patching • 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 • Consult to and collaborate with researchers and other key IT (e.g. network and security) and Data Center partners in a timely manner • Build and maintain relationships with external vendor technicians and engineers • Collaborate with other systems engineers within the RC ecosystem • Contribute best practices documentation and knowledge transfer • Mentor junior staff • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> • Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment • Help to make strategic decisions regarding deployment of RC solutions • Set strategy for monitoring and maintaining the health and integrity of RC systems including upgrading and patching • Manage team resources, time and projects • Contribute to budget setting for the maintenance and operational costs and future RC investments • Manage the relationship with key IT (e.g. network and security) and Data Center partners to enable RC systems deployments in a timely manner • Build and maintain relationships with external technology vendors and act as liaison to technology providers for researchers • Maintain relationship with internal purchasing, finance, shipping & receiving • Review process and procedure for systems management that must meet regulated data compliant standards • Promote trainings in broad area of RC systems engineering to enhance team skills • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
		<ul style="list-style-type: none"> • Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment • Make strategic decisions regarding deployment of RC solutions • Set strategy for monitoring and maintaining the health and integrity of RC systems including upgrading and patching • Manage multiple team resources, time and projects • Set the budget for the maintenance and operational costs and future RC investments • Manage the relationship with key IT (e.g. network and security) and Data Center partners to enable RC systems deployments in a timely manner • Build and maintain relationships with external technology vendors and act as liaison to technology providers for researchers • Maintain relationship with internal purchasing, finance, shipping & receiving • Review process and procedure for systems management for systems that must meet regulated data compliant standards • Promote trainings in broad area of RC systems engineering to enhance team skills • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> • Minimum of seven years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> • Minimum of nine years' post-secondary education or relevant work experience • Minimum of two years of mentoring or project management 	<ul style="list-style-type: none"> • Minimum of eleven years' post-secondary education or relevant work experience • Minimum of two years of mentoring or project management
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
<ul style="list-style-type: none"> • Broad knowledge of the deployment and management of RC 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 	<ul style="list-style-type: none"> • Broad knowledge of the deployment and management of RC 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 	<ul style="list-style-type: none"> • Broad knowledge of the deployment and management of RC 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
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Researcher Facing – Professional	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Facilitation Professional II		Job Title: IT RC Facilitation Professional III	
Job Code: I1156P		Job Code: I1157P	
Grade Level: 56	Exemption: Exempt	Grade Level: 57	Exemption: Exempt
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Independently assist researchers in onboarding to state-of-the-art RC systems, tools, and software to enable research productivity.		Engage and collaborate with researchers in the use of a broad set of state-of-the-art RC systems, tools, and software to enable research productivity. Partner with researchers to co-create and co-learn relevant computing and data capabilities.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Assist a wide range of researchers through support requests (i.e. email, ticketing systems, chats) Assist with routine issues in using RC systems Provide onboarding to state-of-the-art RC systems, tools, and software to enable research productivity Occasionally provide solutions to researchers that facilitate and/or enable research Connect and coordinate the interactions between researchers and technology providers Assist in review and testing of training material Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Engage and collaborate with a wide range of researchers through support requests (i.e. email, ticketing systems, chats) and in person consultations during office hours Help to facilitate the design and debugging of research workflows alongside researchers Connect and coordinate interactions between researchers and technology providers Provide regular communications to systems and software/data professionals Enhance learning with full awareness of the local research computing and data landscape Contribute to building curriculum and teach trainings for basic use of RC for researchers Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
		<ul style="list-style-type: none"> Advise a wide range 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 Facilitate the design, debugging, and automating/scripting of complex research workflows alongside researchers Connect and coordinate interactions between researchers and technology providers Provide regular communications to systems and software/data professionals 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 RC Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of two years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of five years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of seven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology	Job Family: Research Computing: Researcher Facing – Professional
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)	
Job Title: IT RC Facilitation Professional V	Job Title: IT RC Facilitation Professional VI
Job Code: I1159P	Job Code: I1160P
Grade Level: 59 Exemption: Exempt	Grade Level: 60 Exemption: Exempt
Effective/Revision Date: December 2019	Effective/Revision Date: December 2019
Job Summary	
Lead a team of researchers in the best use of a broad set of state-of-the-art RC 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. Lead multiple projects simultaneously.	Make strategic decisions regarding the facilitation and education investments to keep up with the pace of complex research problems. Provide expertise and cross-organizational guidance within a team of researchers and RC professionals in the best use of a broad set of state-of-the-art RC 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. Lead multiple projects simultaneously.
Typical Core Duties	
<ul style="list-style-type: none"> • Lead facilitation and education efforts for researchers in the broad use of large-scale computing and data services • Provide in-depth consultation with researchers through regular engagements • Develop enhancements to workflows by having a deep understanding of current technology, software and tools • Lead cross-functional technical teams and projects alongside research programs • Provide regular communications to researchers and technology providers local and external • Contribute best practices documentation, present at conferences, or publish in peer reviewed journals • Lead trainings on specific areas of technology, software or tools • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	<ul style="list-style-type: none"> • Lead the facilitation and education efforts for researchers in the broad use of large-scale computing and data services • Provide in-depth consultation with researchers through regular engagements • Develop enhancements to workflows by having a deep understanding of current technology, software and tools • Lead cross-functional technical teams and projects alongside research programs • Provide regular communications to researchers and technology providers local and external • Contribute best practices documentation, present at conferences, or publish in peer reviewed journals • Lead trainings on specific areas of technology, software or tools • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct

Job Family Matrix

Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of nine years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of eleven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements
Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Researcher Facing – Management	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Facilitation Mgt IV		Job Title: IT RC Facilitation Mgt V	
Job Code: I1158M		Job Code: I1159M	
Grade Level: 58 Exemption: Exempt		Grade Level: 59 Exemption: Exempt	
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Advise researchers in the best use of a broad set of state-of-the-art RC 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.		Actively contribute to strategic decisions regarding the facilitation and education investments to keep up with the pace of complex research problems. Set strategy for engaging with faculty research groups. Lead and participate in cross-functional management teams and projects. Establish partnerships with other academic and library technology groups.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Advise a wide range 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 Facilitate the design, debugging, and automating/scripting of complex research workflows alongside researchers Connect and coordinate interactions between researchers and technology providers Provide regular communications to systems and software/data professionals 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 RC for researchers Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Lead facilitation and education efforts for researchers in the broad use of large-scale computing and data services Manage team resources, time and projects Contribute to budget setting for the maintenance and operational costs and future RC investments Build and maintain relationships with faculty researchers and technical leads Establish partnerships with other academic and library technology groups Contribute best practices documentation, present at conferences, or publish in peer reviewed journals Remain current in larger landscape of trainings on specific areas of technology, software or tools Promote trainings for staff in broad area of large-scale computing and data services Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Provide expert knowledge to researchers in the broad use of large-scale computing and data services Manage team resources, time and projects Contribute to budget setting for the maintenance and operational costs and future RC investments Build and maintain relationships with faculty researchers and technical leads and participate in funding opportunities Engage and collaborate with other academic, library and research leadership Contribute best practices documentation, present at conferences, or publish in peer reviewed journals Remain current in larger landscape of trainings on specific areas of technology, software or tools Promote trainings for staff in broad area of large-scale computing and data services Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Provide expert knowledge to researchers in the broad use of large-scale computing and data services Manage team resources, time and projects Contribute to budget setting for the maintenance and operational costs and future RC investments Build and maintain relationships with faculty researchers and technical leads and participate in funding opportunities Engage and collaborate with other academic, library and research leadership Contribute best practices documentation, present at conferences, or publish in peer reviewed journals Remain current in larger landscape of trainings on specific areas of technology, software or tools Promote trainings for staff in broad area of large-scale computing and data services Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of seven years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of nine years' post-secondary education or relevant work experience Minimum of two years of mentoring or project management 	<ul style="list-style-type: none"> Minimum of eleven years' post-secondary education or relevant work experience Minimum of two years of mentoring or project management
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
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Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Software Data Facing – Professional	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Software/Data Professional II		Job Title: IT RC Software/Data Professional III	
Job Code: I1256P		Job Code: I1257P	
Grade Level: 56	Exemption: Exempt	Grade Level: 57	Exemption: Exempt
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Independently maintain software that supports and enriches research productivity and reliability. Develop software and data services with researchers to ensure that modern standards of reproducible code are kept.		Participate in the design of software that supports and enriches research productivity and reliability; implement software solutions. Develop software and data services with researchers to ensure that modern standards of reproducible code are kept.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Learn from developer meetings with researchers how to design, plan, and implement software that enriches research productivity and reliability Begin to build an understanding of research activities through regular engagements Follow a scope of work, project plan, working on and track the progress of small number of milestones at a time Maintain aspects of software code and custom data processing pipelines for complex environments Troubleshoot problems and suggest improvements to coding practices Grow skills in a specific technology to develop custom solutions to meet researchers needs Work in a team of developers and researchers in collaboration with systems professionals Provide regular communications to project leads with updates Maintain internal code design and development guides for future contributors Learn to teach workshops for researchers on sustainable software and data management practices Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Collaborate with researchers in the design, planning, and implementation software that enriches research productivity and reliability Build understanding of research activities through regular engagements Provide feedback on scope of work and project plan and track progress of regular milestones Build and maintain aspects of software code and custom data processing pipelines for complex environments Apply firm understanding of specific technology to develop custom solutions to meet researchers' needs Work in a team of developers and researchers in collaboration with systems professionals Provide regular communications to project leads with updates Build internal code design and development guides for future contributors Teach workshops for researchers on sustainable software and data management practices Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Advise researchers in the design, planning, and implementation of software or data analysis that enriches research productivity and reliability Build deep understanding of specific research activities through regular engagements Develop a scope of work and timely project plan with regular milestones Build and maintain software code and custom data processing pipelines for complex environments Apply firm understanding of numerical methods or data analysis to develop custom solutions to meet researchers' needs Work in a team of developers and researchers in collaboration with systems professionals Provide regular communications to PI's/stakeholders with project updates Build internal code design and development guides for future contributors Build advanced curriculum and teach workshops for researchers on sustainable software and data management practices that preserve the reproducibility of their research domain Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Advise researchers in the design, planning, and implementation of software or data analysis that enriches research productivity and reliability Build deep understanding of specific research activities through regular engagements Develop a scope of work and timely project plan with regular milestones Build and maintain software code and custom data processing pipelines for complex environments Apply firm understanding of numerical methods or data analysis to develop custom solutions to meet researchers' needs Work in a team of developers and researchers in collaboration with systems professionals Provide regular communications to PI's/stakeholders with project updates Build internal code design and development guides for future contributors Build advanced curriculum and teach workshops for researchers on sustainable software and data management practices that preserve the reproducibility of their research domain Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> • Minimum of two years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> • Minimum of five years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> • Minimum of seven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> • Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> • Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology	Job Family: Research Computing: Software Data Facing – Professional
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)	
Job Title: IT RC Software/Data Professional V	Job Title: IT RC Software/Data Professional VI
Job Code: I1259P	Job Code: I1260P
Grade Level: 59 Exemption: Exempt	Grade Level: 60 Exemption: Exempt
Effective/Revision Date: December 2019	Effective/Revision Date: December 2019
Job Summary	Job Summary
Lead a team of software/data professionals and researchers in the design, planning, and implementation of software and data services that enrich research productivity and reliability. Develop software and data services with researchers to ensure that modern standards of reproducible research are kept. Lead multiple projects simultaneously.	Provide expertise and cross-organizational guidance within a team of software/data professionals and researchers in the design, planning, and implementation of software and data services that enrich research productivity and reliability. Develop software and data services with researchers to ensure that modern standards of reproducible research are kept. Lead multiple projects simultaneously.
Typical Core Duties	Typical Core Duties
<ul style="list-style-type: none"> • Lead the design, planning, and implementation of software or data analysis that enriches research productivity and reliability • Build deep understanding of specific research activities through regular engagements • Lead the development of multifaceted scope of work and timely project plans with regular milestones • Build and maintain software code and custom data processing pipelines with deep understanding of current technology, software and tools • Build upon specific research knowledge to design and develop custom solutions to meet researchers' needs • Lead a team of developers and researchers in collaboration with systems professionals • Provide regular communications on large-scope project updates to internal and external PI's/stakeholders • May contribute to the development of software/data service project communities beyond local institution for the purpose of sustainability • Set standards for internal code design and development guides • Contribute best practices documentation, present at conferences, or publish in peer reviewed journals regarding sustainable software and data management practices • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	<ul style="list-style-type: none"> • Provide expert knowledge in the design, planning, and implementation of software or data analysis that enriches research productivity and reliability • Build deep understanding of specific research activities through regular engagements; disseminate new resulting knowledge and anticipate future research needs • Provide expert development knowledge and experience for multifaceted scope of work and timely project plans with regular milestones • Build and maintain software code and custom data processing pipelines for next-generation large-scale computing and data analytics environments • Direct and develop a team of expert developers and researchers in collaboration with systems professionals within a larger ecosystem • Provide regular communications on large-scope project updates to internal and external PI's/stakeholders • Contribute to the development of software/data service projects communities beyond local institution for the purpose of sustainability • Set standards for internal code design and development guides • Present and publish in peer reviewed technical or domain specific journals and conferences regarding sustainable software and data management practices • Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct

Job Family Matrix

Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of nine years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of eleven years' post-secondary education or relevant work experience
Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements
Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours

Job Family Matrix

Job Function: Information Technology		Job Family: Research Computing: Software Data Facing – Management	
Job Family Summary: Perform or manage leading edge technology services that support the advancement of research. Roles in this family include those responsible for software and data, facilitation and systems services in partnership with researchers. (If the role engages in independent research, please also consider the research job function when slotting.)			
Job Title: IT RC Software/Data Mgt IV		Job Title: IT RC Software/Data Mgt V	
Job Code: I1258M		Job Code: I1259M	
Grade Level: 58	Exemption: Exempt	Grade Level: 59	Exemption: Exempt
Effective/Revision Date: December 2019		Effective/Revision Date: December 2019	
Job Summary		Job Summary	
Design, plan, and implement software and data services that support and enrich research productivity and reliability. Develop software and data services with researchers to ensure that modern standards of reproducible research are kept.		Actively contribute to strategic decisions regarding investments in sustainable software engineering and data services to keep up with the pace of complex research problems. Set strategy for engaging with faculty research groups. Participate in cross-functional management teams and projects. Establish partnerships with other academic and library technology groups.	
Typical Core Duties		Typical Core Duties	
<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Advise researchers in the design, planning, and implementation of software or data analysis that enriches research productivity and reliability Build deep understanding with specific research activities through regular engagements Develop a scope of work and timely project plan with regular milestones Build and maintain software code and custom data processing pipelines for complex environments Apply firm understanding of numerical methods or data analysis in develop custom solutions to meet researchers needs Work in a team of developers and researchers in collaboration with systems professionals Provide regular communications to PI's/stakeholders with project updates Build internal code design and development guides for future contributors Build advanced curriculum and teach workshops for researchers on sustainable software and data management practices that preserve the reproducibility of their research domain Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 		<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Lead the design, planning, and implementation of software or data analysis that enriches research productivity and reliability Build deep understanding of specific research activities through regular engagement Manage team resources, time and projects Contribute to budget setting for the maintenance and development costs of future software/data services Establish partnerships with other academic and library technology groups Build and maintain relationships with faculty researchers and technical leads and participate in funding opportunities Collaborate with other academic and library technology groups Set the standards for internal code design and development guides Contribute best practices documentation, present at conferences, or publish in peer reviewed journals Remain current in larger landscape of software development and data management practices within specific areas of technology Promote trainings for staff in broad area of software engineering and data services Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 	
<ul style="list-style-type: none"> Responsible for effective staff management, including hiring and orientation, training and development, workflow and performance management, and the promotion of an inclusive and innovative work environment Provide expert knowledge in the design, planning, and implementation of software or data analysis that enriches research productivity and reliability Build deep understanding of specific research activities through regular engagements; disseminate new resulting knowledge and anticipate future research needs Manage team resources, time and projects Contribute to budget setting for maintenance and operational costs and future RC investments Build and maintain relationships with faculty researchers and technical leads and participate in funding opportunities Collaborate with other academic, library and research leadership Set the standards for internal code design and development guides 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 Remain current in larger landscape of software development and data management practices within specific areas of technology Promote trainings for staff in broad area of large-scale computing and data services Abide by and follow the Harvard University IT technical standards, policies and Code of Conduct 			

Job Family Matrix

Basic Qualifications	Basic Qualifications	Basic Qualifications
<ul style="list-style-type: none"> Minimum of seven years' post-secondary education or relevant work experience 	<ul style="list-style-type: none"> Minimum of nine years' post-secondary education or relevant work experience Minimum of two years of mentoring or project management 	<ul style="list-style-type: none"> Minimum of eleven years' post-secondary education or relevant work experience Minimum of two years of mentoring or project management
Additional Qualifications and Skills	Additional Qualifications and Skills	Additional Qualifications and Skills
Certificates and Licenses	Certificates and Licenses	Certificates and Licenses
<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred 	<ul style="list-style-type: none"> Completion of Harvard IT Academy specified foundational courses (or external equivalent) preferred
Physical Requirements	Physical Requirements	Physical Requirements
Working Conditions	Working Conditions	Working Conditions
<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours 	<ul style="list-style-type: none"> Occasionally required to work outside of normal business hours, and may be contacted during off hours