

Computer Scientist

	Staff Computer Scientist I	Staff Computer Scientist II	Staff Computer Scientist III	Senior Staff Computer Scientist
Individual Contributor				
Responsibilities				
Task Complexity	Delivers productively on well defined tasks	Addresses moderately complex problems, given guidelines for their resolution	Solves very complex problems which have limited precedents available	Deals with a broad range of problems of the highest complexity for which there may be no precedents
Planning	Meets user's requirements	Makes accurate estimates of the effort required to deliver on moderately-sized projects	Accurately estimates the effort required for delivery of very complex, multi-person efforts	Successfully plans highly complex multi-person efforts with limited precedents or limited initial information
Scope/impact	Work affects individuals, or is integrated into wider efforts that affect the lab	Contributes to the ability of the lab to meet its goals, and/or contribute to work used at a number of other sites	Directly impacts the ability of the lab to meet its goals and/or make significant contributions to work used at a number of other sites	Enables the lab to meet its goals and/or make significant contributions to software used world wide
Leadership/oversight	Responsible for managing own time effectively under the oversight of more senior staff. May lead technical staff.	Responsible for tasks of moderate size and complexity. May lead or supervise a small team or group.	Responsible for large and very complex tasks. May lead or supervise a team or group, including more-senior staff.	Responsible for large and highly complex tasks. May lead a large group. Guide and provide ultimate direction for significantly-sized projects.
Background & Experience				
Technical Breadth and Depth, Judgment	Competent to perform assigned tasks and provide practical solutions to assigned problems. Knowledgeable in many areas.	Expert in one area and competent in several. Demonstrates good cost vs. benefit sense.	Expert and leader at lab level involved in decision making at department level. Proposes solutions reflecting understanding of the rationale for specifications and system interdependencies.	Expert and leader at lab level. Involved in decision making at lab. Recognized expert in one or more fields. Insights into rationale, specifications and system interdependencies lead to global optimizations of the entire system or enterprise (co-design / integrated system design).
Recognition	Recognized by peers as competent to perform the assigned tasks.	Recognized within the lab as a competent professional in the field.	Recognized by management as a contributor with a significant impact on lab performance. Recognized as an expert in the field.	Recognized outside the lab as a noteworthy contributor to the state of the art of the field.
Initiative	Has demonstrated initiative by seeking solutions to assigned problems and tasks.	Has identified problems, projects and tasks and sought solutions. Has shown initiative within the assigned scope, independent of the supervisor.	Has consistently shown initiative beyond assigned scope.	Has shown initiative in extending the state of the art in the field.
Communication and Interpersonal Skills	Able to present work clearly and works well with others.	Able to present complex work to and interact with audiences or customers of varying expertise and backgrounds. Works well with peers and in team leadership roles and is able to assign tasks.	Able to present options to complex problems and persuasively argue positions and proposals. Demonstrates leadership skills and has successful working relationships with management.	(same)

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Education and Experience	BS (in relevant field)	BS + 3 years	BS + 6 years	MS + 12 years
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Manager				
Technical	<i>n/a</i>	<i>(same as III except that scope is smaller)</i>	Technically knowledgeable in all areas of the group's scope, or having a demonstrated ability to achieve that level of proficiency in a short period of time.	<i>(same except that scope is larger)</i>
Responsibilities	<i>n/a</i>	Responsible for projects involving multiple people.	Responsible for large and fairly complex projects involving a large team or group.	Responsible for a scope of significant size critical to the laboratory's success. Manages activities of a complex nature where there are limited precedents available. Decisions have a large impact on the laboratory.
Management	<i>n/a</i>	Ability to manage group to achieve goals within budget. Demonstrated fiscal responsibility.	Ability and willingness to balance the needs and desires of a group with those of the laboratory, and take ownership of higher level institutional goals. Ability to estimate cost and manpower for assigned projects.	Ability to make optimal trade-offs in own goals and resources (staff and budget) to help the laboratory achieve its goals. Ability to make things happen.
Interpersonal Skills	<i>n/a</i>	Ability to work well with others in a team environment, providing input and feedback in a helpful way.	Ability to work well with and mentor both high and low performers in a team or group environment, setting expectations, and providing input and feedback in a helpful way that fosters accountability. Ability to deal with personnel problems in a constructive manner.	Ability to mentor staff of various skills and personalities, including both technical staff and other managers.
Communication	<i>n/a</i>	Ability to effectively communicate organizational goals to team. Able to interact well with vendors.	Ability to present options and persuasively argue for proposals. Ability to work productively with vendors.	Ability to negotiate complex arrangements with other groups, service providers, collaborators and vendors.
Experience	<i>n/a</i>	Ability to serve effectively as a head of a small team	Proven leadership skills. Identifies problems and actively devises appropriate solutions, particularly those dealing with manpower.	Proven management experience. Independently identifies complex problems and devises optimal and innovative solutions to problems that often cross organizational boundaries.
Education and Experience		BS + 5 years	BS + 10 years	MS + 12 years

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