

1988 PROFESSIONAL COMPENSATION DATA



Keeping up with computer salaries is an important part of our job—and something you must do to realize your full potential.

In order to keep our Survey representative and unaffected by extremes, we have used median rather than mean figures. In addition, we have included the twentieth upper and lower percentiles in each category to

provide salary ranges. (In other words, the twentieth percentile represents the figure at which 20% of the respondents earn that figure or less. The median represents the figure at which half earn more and half earn less. The eightieth percentile represents the figure at which 20% earn that figure or more.)

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Programming	Vs. Ltr.	20th	Median	80th
Commercial	<2	19.9	24.3	28.7
	2-3	23.5	28.0	32.5
	4-6	25.8	30.4	35.0
	> 6	30.6	36.0	42.5
Engineering/Scientific	<2	23.4	30.0	34.2
	2-3	24.5	30.6	35.5
	4-6	29.6	34.8	40.7
	> 6	32.8	40.0	48.4
Microcomputer	<2	18.0	22.0	27.1
	2-3	20.0	25.0	29.8
	4-6	26.1	33.0	38.9
	> 6	34.8	43.0	51.6
Minicomputer	<2	19.3	23.2	28.8
	2-3	22.4	27.0	32.9
	4-6	25.4	31.0	37.2
	> 6	30.3	37.0	45.9
Software Engineer	<2	23.2	28.6	31.7
	2-3	24.9	29.0	33.6
	4-6	29.1	35.0	40.6
	> 6	33.6	41.5	50.2
Systems Software	<2	23.7	27.6	31.5
	2-3	23.5	28.0	31.9
	4-6	26.9	32.0	37.8
	> 6	36.1	42.0	50.0
Management	Vs. Ltr.	20th	Median	80th
→ Data Center Operations		33.2	40.0	52.0
Programming Development		39.8	48.0	58.1
Software Development		44.0	53.0	64.1
→ Systems Development		44.8	54.0	65.3
→ Technical Services		42.5	50.0	61.5
MIS Director		49.2	60.0	76.8
Business Systems	Vs. Ltr.	20th	Median	80th
Consultant	<4	25.4	31.0	37.2
	4-6	30.1	35.0	41.3
	> 6	38.7	45.0	53.6
Project Leader	<4	25.8	31.5	37.8
	4-6	30.1	35.0	41.3
	> 6	36.1	42.0	50.0

Business Systems (Cont.)	Vs. Ltr.	20th	Median	80th
Systems Analyst	<4	24.0	29.3	35.2
	4-6	28.4	33.0	38.9
	> 6	32.7	38.0	45.2
Specialists	Vs. Ltr.	20th	Median	80th
Communications Analyst	<4	27.6	32.5	37.4
	4-6	27.3	35.0	44.5
	> 6	32.0	41.0	48.8
Data Base/Management Analyst	<4	20.7	28.0	33.6
	4-6	28.5	33.5	40.5
	> 6	34.9	41.5	49.4
Information Center Analyst	<4	20.0	26.0	29.1
	4-6	23.4	30.0	36.0
	> 6	30.2	38.2	45.8
Office Automation Analyst	<4	20.0	26.0	29.1
	4-6	25.7	33.0	39.6
	> 6	30.5	38.6	46.3
Sales	Vs. Ltr.	20th	Median	80th
Hardware		30.4	44.0	63.4
Software		26.7	43.8	62.6
Services		28.9	43.1	62.9
Technical Support	<2	18.6	23.2	27.1
	2-3	23.9	29.5	35.1
	4-6	26.6	32.4	39.9
	> 6	36.0	45.0	54.0
Management		45.5	61.5	85.5
Office	Vs. Ltr.	20th	Median	80th
Computer Operator	<2	15.2	19.5	21.6
	2-3	16.0	20.0	22.8
	4-6	23.3	28.8	34.3
	> 6	26.3	33.7	41.5
Edp Auditor	<4	30.8	35.0	42.0
	4-6	32.5	38.2	48.9
	> 6	34.0	40.0	48.4
Technical Writer or Editor	<4	17.2	21.0	24.8
	4-6	27.3	32.5	40.0
	> 6	31.2	39.5	47.8

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Computer Recruiting Specialists

Commercial Programmers and Programmer/Analysts

Responsibilities: Perform detailed program design, coding, testing, debugging, documentation and implementation of commercially oriented information systems. May also be responsible for overall systems specification and design.

Engineering and/or Scientific Programmer/Analysts

Responsibilities: Perform detailed program design, coding, testing, debugging, documentation and implementation of scientific and/or engineering computer applications and certain commercial applications that are mathematical in nature. May assist in overall systems specification and design.

Personal Computer/Microprocessor Programmers and Analysts

Responsibilities: Perform detailed program design, coding, testing, debugging, documentation and implementation of real-time or interactive systems. Typically use interconnected or networked microcomputer/microprocessors. Program design may consist of application modules or support specific subfunctions such as communication, signal processing graphics control, data acquisition or operating systems interface.

Minicomputer Programmers and Programmer/Analysts

Responsibilities: Perform detailed program design, coding, testing, debugging, documentation and implementation of on-line or interactive systems typically using dedicated mini hardware. Program design may consist of application modules or support specific subfunctions such as communications, graphics, data base or operating systems interface.

Systems (Software) Programmers

Responsibilities: Create and/or maintain operating systems, communications software, data base systems, communications software, data base packages, compilers, assemblers, utility programs, etc. Within user organizations, typically support applications programming, provide hardware/software planning and evaluation, modify existing and create special-purpose software, maintain and modify vendor software packages, develop programming standards, oversee technical education, and insure systems efficiency and integrity.

Software Engineers

Responsibilities: Design and develop software to drive computer systems. Develop firmware, drivers, specialized software such as graphics, communications controllers, operating systems and user friendly interfaces. Within vendor environments, work closely with Hardware Engineers and Applications and Systems Programmers, requiring an understanding of all aspects of the product.

Data Base Analyst/Data Management Specialist

Responsibilities: Design and control the use of an organization's data resources. Analyze the interrelationships of data usage and define physical data structures and logical views of data elements. Utilize the facilities of data base management systems and data dictionary software packages to control the data usage. Responsibilities range from the design and creation of data structures to procedures to insure data security, data base backup/recovery and to eliminate data redundancy.

Communications Analyst and Technical Specialists

Responsibilities: Perform detailed program design, coding, testing, debugging, documentation and implementation of data and voice communications software. Within a user environment, will evaluate communications hardware/software, modify vendor software for individual company needs, maintain existing software and functions as a technical advisor to Application Programmers. Within a vendor environment, will work in a group responsible for new communications software development. May design networks, evaluate tariffs and interface with common carriers.

Information Center/Office Automation Analyst/Decision Support Specialist

Responsibilities: Evaluate, implement, and interconnect microcomputers, word processing and office teleprocessing products to allow various levels of management access to data base management systems, electronic mail, query facilities, spread sheets, and decision support systems. Establish methods and criteria for evaluation of office automation hardware and software. Function as a central source for the selection, training and use of a wide range of "off-the-shelf" software—including 4GL products such as FOCUS, NO-MAD, etc. Determine best uses of Local Area Networks (LAN's) to link microcomputers to each other and to larger computers. Provide user training and support.

EDP Auditors

Responsibilities: Perform detailed evaluation of systems and operational procedures. Report findings to upper level management along with specific recommendations to insure systems and procedural integrity and accuracy.

Technical Writers and Editors

Responsibilities: Document programs and systems as well as user manuals, marketing brochures and other documentation required to promote computing systems. Requires interface not only with the systems and programming staff to determine system functions, but also with users and/or customers to assure understanding of the use of the systems. May participate in systems specification and design.

Senior Analyst, Project Leaders and Consultants

Responsibilities: Typically responsible for user liaison, systems specification, systems design and project control. May also supervise Analysts and Programmers through implementation phase and occasionally assist in programming effort. Provide key link between ultimate user and computing resource.

Computer Operators

Responsibilities: Conduct computer operation functions. Monitor and support computer processing, coordinate utilization of input, output, and interchangeable file media. Distribute output, schedule machine utilization and oversee control functions.

Technical Services Managers

Responsibilities: Direct the technical staff responsible for operating system software, telecommunications and data base systems support, maintenance of software packages and hardware/software planning and evaluation. May have responsibility for computer operations and/or internal technical education.

Systems and Project Managers

Responsibilities: In larger organizations, responsible for systems development and implementation within a major functional area or areas; in smaller organizations, usually direct the efforts of Analysts, Applications Programmers or Software Engineers in many different areas.

Data Center Operations Manager

Responsibilities: Direct all computer and peripheral machine operations, data entry, data control, scheduling and quality control. Responsible for systems (software) programming, software maintenance and/or applications maintenance programming is sometimes included.

Computer Systems Directors

Responsibilities: Executive who devotes bulk of energies to overall management and direction of all information systems and/or computer processing or development efforts.

Computer Sales Reps

Responsibilities: Sell computer mainframes, mini/micro systems, software, special purpose systems, peripherals and supplies, facilities management, leasing and/or services.

Computer Sales Managers

Responsibilities: Responsible for management and administration of Sale Representatives. May also have territory or key account direct sales duties.

Computer Sales/Technical Support Reps

Responsibilities: Provide technical support in the sales of hardware and software products and services. Duties include both pre and post-sales support, system studies, feasibility studies, demonstrations and technical presentations.