

Computer science 18186

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Computer Science

Computer Science is an exciting field which requires dedication and hard work. A

Computer Scientist sits at a desk all day and writes programs, technical writes, and

various other tasks. At first a Computer Scientist starts under an executive, but in a few

short years they are executives themselves. If a person wants to enter the field of

Computer Science one must meet the requirements, takes advantages of opportunities

available, and face the demands of the job.

A Computer Scientist must be able to think logically and to concentrate for long

periods of time on what some would consider a very tedious task. One must remember

significant amounts of information and pay attention to detail. Computer Scientist usually

start as an Computer Programmer(Walker 3). It sometimes takes months to do one

program(Walker 3). First it may take a couple of months to write a program and then

another month to debug it (Walker 3). According to Walker, a researcher in the field of

computer science, employers are always eager to hire people with good communication

skills. In a competitive job market, companies need effective communications to help

deal with board meeting, various meeting with program buyers and clients and other

confrontations with people in the company. A Computer Scientist can be qualified for a

wide range of jobs such as technical writing, computer programming and editing

publications.

In 1970 to 1971 only 2, 388 bachelor s degrees in computer informational sciences

were awarded in a single academic year in the entire United States (79).

There

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are numbers of certification available through many institutions throughout the United

States (Computer Operator/ Programmer 1).

Employers only accept students with at least two to four years of experience in

the field and a college degree (Computer Operator/ Programmer 2).

Computer

Scientist including Computer Engineers conduct research, design computer, and discover

and use principles of applying computers (Dictionary of Occupational Titles and

Occupational Outlook Handbook 3). Some Computer Scientist are employed by the

academic institution and work in the areas from theory to hardware to language design on

multi- discipline projects (Dictionary of Occupational Titles and Occupational Outlook

Handbook 3). According to the article called Labor Market Information which is an

article dealt with Computer Science labor market in California, Computer Programming

is taught at a variety of patterns secondary schools. Many Computer Programmers are

college graduates but others have taken a special courses in computer programming and

are experienced in fields such as an inventory control, engineering, and accounting.

Although, there are certain levels of education and quality of training that employers are

looking for. This is because of the many qualified college graduates who have majored

in the field of Computer Science. Also another factor is the great complexity of

programs of computers and software. There are acceptable careers but not preferred that

can handle the demands of an Computer Scientist. The different careers are engineering,

mathematics, informational science, and physical science (4). As the industry matures an

undergraduate degree in computer science is increasingly becoming the standard certification for many position, especially those with technical system

emphasis and as more and more students enter the job market with formal Computer

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Science degrees, one can expect an increase of competition (Walker 79).

Graduate

degrees are even now sometimes required (Labor Market Information).

Computers

have such a wide range of applications in so many different fields. Many students are

combining the study of computers with their majors (Walker 79).

Computer Science executives take years to get to the pinnacle of their

companies. In the beginning Computer Scientist may work as a computer programmer

(Computer Operator/ Programmer 2). In the first year all programmers work under

intense supervision. After that they have less and less supervision and then become a

supervisor themselves (Computer Operator/ Programmers 2). Many employers can

already choose from the number of graduates and prefer students with outstanding

grades, related work in the field or graduates study(Walker 79). There are many

opportunities awaiting one in computer science field. According to Julie Kling a

researcher of Computer Science, a young, expanding company may offer opportunity for

rapid advancement . At the same time, it may be financially less stable.

Some

companies have their own ideals one company may be liberal and others may be

conservative but one must match a company that fits one s personality.

Some

environments offer fast paced, competitive workplace whereas another may offer just the

opposite. Kling suggests that one must find an employer that one is comfortable with

and company with vast amounts of opportunity (12). Whatever one's choice of

employment computer careers open a window of opportunity. Employment in

computer-related careers is expected to grow much faster than averaged throughout the

1990s. According to Kling it will be at a less frantic pace than during the 1970s

and 1980s. In a study conducted assuming best case, worse case, and average estimates,

there has been the case steady rise in the Computer Science field. Kling says that there

will be many opportunities for both systems and application programmers, especially in

firms that offer computer consulting and service. Another study suggests that between

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the years in 1988 and 2000 computer programmers and systems talent analysis will be at

the top 20 fastest growing jobs. The study also estimates of the number of computer

programmers will increase by 48. 1 percent. The number of computer related occupations

is expect it to increased 53. 3 percent during the same time. Although the overall number

is expected to increase to the year 2000. Interestingly enough few programmers leave the

computer field(115). A Computer Scientist is qualified to fill the position of an

Technical Writer. According to Walker people who began as technical writers may

advance into administrative positions directing other Technical Writers or production

departments and directing the document production (72). A Computer Scientist must be

a good communicator. They must be able to write down on how one s program or

hardware can be used this is also the job of an Technical Writer. Walker states with the

increase of computers in the workplace and the home more computer scientist will be

required (79). According to the an article called Computer Operator/ Programmers ,

which is about the job characteristics, states that only five percent of Computer Scientist

are women. The number of people in the profession are 537, 000 and growing (4).

Computer Science as a career can be financial rewarding. According to the article

Computer Operator/Programmer after about two years under supervision of established

computer programmers one starts handling sections of code or modules pieces of

programs. In five years one s salary increase as does the hours. Duties include defining

programming, architecture, coding and debugging junior programmers codes. One of the

features of after five years is the travel time. The starting salary for a Computer Scientist

is \$39, 000. In five the salary is increased to \$70, 000, and after fifteen years it is increased

to \$90, 000(4).

As with every job there are benefits. Most firms offer fringe benefit

packages which include sick leave, vacation pay, the traditional holidays and attractive

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stock options or profit sharing plans (Labor Market Information 2). There are some

plans such as 401K plan allow to save part of one s income for retirement(Kling 111).

This can prove to be very attractive savings plan. According to Kling employee stock

can be purchased at an discount usually at the lower of the beginning and ending price

during a designated period. Of course then if the company does well then so does the

share holder , this is probably one of the best benefits.. Kling states that some computer

companies share profits. Employees can have incentive options there are rewarded to

valuable employees by giving them an opportunity to purchase blocks of stock at

considerable discount. Although, this is the standard in some companies do not expect

this option at entry level. Kling also states many companies offer tuition reimbursement

program to their employees. Education is a very expensive so this is a very attractive

offer. Many computer professionals pursue their masters degree in a part-time

programs. The computer companies often make it s professional staff back to school to

learn the latest in technology(111). These are all great benefits offered in the profession of

Computer Science.

Computer Scientist work the standard forty hour week(Labor Market

Information 2). Although some over time may be required it often does not arise unless

one's deadline is near(Labor Market Information 2)

Computer related careers are growing availability every year. They expected to

be in the top three fastest growing jobs among the top twenty(1998-1999 Occupational

Handbook 1). Computer have become standard parts of our homes, work place and

basically living. According to the article Labor Market Information they are used for

modern industrial and government operations. Computers can solve mathematical

operations, store, use, and process data(1). According to 1998-1999 Occupational

Handbook the rapid spread of computers have generated a need for highly trained

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Computer Scientists. Computer Scientist are involved in many different areas such as

design of computers, develop informational technology, develop computers software, and

adapt principals for applying computers to new uses. A Computer Scientist perform

duties of other computer professionals, but they are distinguished by higher level of

theoretical expertise and innovations they apply to complex problems(4).

Computer Science is a very interesting field. If a person would like to enter the

field of computer science he or she must meet certain requirements such as having a

good personality, taking the required college courses, and performing to the best of one s

ability. The career of Computer Science is demanding but with hard work there will be

many opportunities. The demand for Computer Scientist is great. Although at times this

career can be tedious and demanding it is still an interesting career.