

# Linking Majors to Careers

## COMPUTER SCIENCE

# Computer Science

Computer Science is the use of quantitative and analytical tools to design, implement, maintain, and improve the hardware, firmware and software which are required to make modern computing systems operate in an optimal manner. Since computers are needed in every field and business nowadays, jobs are located in almost every industry. The best jobs will go to the those with a bachelor's degree and some work experience (perhaps from a summer job or internship). The outlook for each individual will also depend on which languages and hardware are known.

**SKILLS:** The person who majors in **Computer Science** at Regis University has the opportunity to learn a variety of essential **skills** such as:

- ability to cope with constant change
- analytical ability
- proficiency in writing
- mathematical skills
- decision making
- structural and Object-Oriented languages, equipment and applications programs
- problem solving
- ability to organize and think logically
- proficiency for accurate details
- evaluating

### **SOME TIPS ON GETTING A JOB THAT UTILIZES YOUR CS SKILLS:**

1. Complete an internship in the CS field.
2. Get summer employment in the CS field.
3. Do projects for professors that stretch your knowledge and skills.
4. Learn the basic foundation principles of all programming languages.
5. Join the student chapter of the Association for Computing Machinery on the Regis campus.

**RELATED JOBS:** Listed below are typical career fields Computer Science majors may enter:

- |                                  |                                   |
|----------------------------------|-----------------------------------|
| systems analyst                  | systems manager                   |
| digital design and administrator | database design and administrator |
| consultant                       | CAD/CAM engineer                  |
| software engineer                | telecommunications engineer       |
| network analyst                  | programmer analyst                |

Hardware Engineer	<a href="http://stats.bls.gov/oco/ocos266.htm">stats.bls.gov/oco/ocos266.htm</a>
Applications Programmer	<a href="http://stats.bls.gov/oco/ocos110.htm">stats.bls.gov/oco/ocos110.htm</a>
Auditor	<a href="http://stats.bls.gov/oco/ocos001.htm">stats.bls.gov/oco/ocos001.htm</a>
Budget Analyst	<a href="http://stats.bls.gov/oco/ocos003.htm">stats.bls.gov/oco/ocos003.htm</a>
Business Programmer	<a href="http://stats.bls.gov/oco/ocos110.htm">stats.bls.gov/oco/ocos110.htm</a>
Computer Aided Designer	<a href="http://stats.bls.gov/oco/ocos090.htm">stats.bls.gov/oco/ocos090.htm</a>
Database Administrator	<a href="http://stats.bls.gov/oco/ocos042.htm">stats.bls.gov/oco/ocos042.htm</a>
Economist	<a href="http://stats.bls.gov/oco/ocos055.htm">stats.bls.gov/oco/ocos055.htm</a>
System Administrator	<a href="http://stats.bls.gov/oco/ocos268.htm">stats.bls.gov/oco/ocos268.htm</a>
Market Researcher	<a href="http://stats.bls.gov/oco/ocos055.htm">stats.bls.gov/oco/ocos055.htm</a>
Mathematician	<a href="http://stats.bls.gov/oco/ocos043.htm">stats.bls.gov/oco/ocos043.htm</a>
Systems Analyst	<a href="http://stats.bls.gov/oco/ocos042.htm">stats.bls.gov/oco/ocos042.htm</a>
Operations Analyst	<a href="http://stats.bls.gov/oco/ocos044.htm">stats.bls.gov/oco/ocos044.htm</a>
Programmer	<a href="http://stats.bls.gov/oco/ocos110.htm">stats.bls.gov/oco/ocos110.htm</a>
Software Engineer	<a href="http://stats.bls.gov/oco/ocos267.htm">stats.bls.gov/oco/ocos267.htm</a>
Statistician	<a href="http://stats.bls.gov/oco/ocos045.htm">stats.bls.gov/oco/ocos045.htm</a>
Systems Analyst	<a href="http://stats.bls.gov/oco/ocos042.htm">stats.bls.gov/oco/ocos042.htm</a>
Information Systems Manager	<a href="http://stats.bls.gov/oco/ocos258.htm">stats.bls.gov/oco/ocos258.htm</a>
Technical Writer	<a href="http://stats.bls.gov/oco/ocos089.htm">stats.bls.gov/oco/ocos089.htm</a>

## **PROFESSIONAL ORGANIZATIONS IN THIS FIELD:**

Cobol Jobs	<a href="http://www.coboljobs.com">www.coboljobs.com</a>
Dice	<a href="http://www.dice.com">www.dice.com</a>
HotJobs	<a href="http://hotjobs.yahoo.com">hotjobs.yahoo.com</a>
Internet Jobs	<a href="http://www.internetjobs.com">www.internetjobs.com</a>
IT Careers.com	<a href="http://www.itcareers.com">www.itcareers.com</a>
Jobs in C++	<a href="http://www.cplusplusjobs.com">www.cplusplusjobs.com</a>
Just Tech Jobs	<a href="http://www.justtechjobs.com">www.justtechjobs.com</a>
Microsoft	<a href="http://www.microsoft.com">www.microsoft.com</a>
Sciencejobs.com	<a href="http://www.sciencejobs.com">www.sciencejobs.com</a>
Starpoint Solutions	<a href="http://www.starpoint.com">www.starpoint.com</a>
Web Programming Jobs	<a href="http://www.webprogrammingjobs.com">www.webprogrammingjobs.com</a>
American Society for Information Science	<a href="http://www.asis.org">www.asis.org</a>
Association for Information Systems	<a href="http://www.aisnet.org">www.aisnet.org</a>
Association of Information Technology Professionals	<a href="http://www.aitp.org">www.aitp.org</a>
The Internet Society	<a href="http://www.isoc.org">www.isoc.org</a>
IEEE Computer Society	<a href="http://www.computer.org">www.computer.org</a>

## CAREER RESOURCES IN:

- CAREER SERVICES LIBRARY (CS)
  - DAYTON MEMORIAL LIBRARY (DM)
  - ON THE INTERNET
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### Career and Occupational Information

*Occupational Outlook Handbook* (CS, DM, and <http://www.bls.gov/oco>)

ONET <http://online.onetcenter.org>

*Adams Jobs Almanac* (CS, DM)

*Dictionary of Occupational Titles* (CS, DM)

*Great Careers for... series* (CS)

*Careers for ... series* (CS)

*Careers in ... series* (DM)

*Encyclopedia of Career and Vocational Guidance* (DM)

*Liberal Arts Career News* (CS)

### Professional Organizations

*National Directory of Non-Profit Organizations* (DM)

*Denver Meets* (DM)

*Encyclopedia of Associations* (link on DM online catalog)

Internet Public Library listing at:

<http://www.ipl.org/div/aon>

### Employer Directories

*Reference USA* (link on DM online catalog)

*Denver Business Journal Top 25 Book of Lists* (CS, DM)

*Colorado Business Directory* (DM and available via link on DM online catalog)

*Directory of Colorado Manufacturers* (DM)

*Rocky Mountain High Tech. Directory* (DM)

*Almanac of American Employers* (DM)

*Job Banks for US cities* (CS, DM)

*Standard & Poor's Register of Corp. Directory* (link on DM online catalog)

*Thomas Register of American Manufacturers*  
<http://www.thomasregister.com>

*Directory of Colorado Non-Profits* (DM and <http://www.coloradonoprofits.org>)

### Employment Outlook

*Occupational Outlook Quarterly* (CS, DM)

*Job Rated Almanac* (DM)

*CAM report* (CS)

*Employment Outlook for Colorado* (DM)

### Internships

Internships are placements with employers that give Regis College students with a GPA of 2.5 or better the opportunity to combine coursework with real-life experience while earning academic credit. Internships enhance academic knowledge, personal development and professional preparation. In addition, a successful internship can give students an edge when hiring decisions are made because employers seek applicants with practical experience in their field. Students interested in an internship need to register with the **Academic Internship Program** for help with determining a site placement, learning objectives and academic criteria.

### Graduate School Information

*Real Guide to Grad School* (CS, DM)

*Peterson's Graduate and Professional Programs* (CS, DM and <http://www.petersons.com>)

*Gorman Report* (CS)

*Graduate School Admissions Advisor* (CS)

*Getting what you came for* (CS)

*Educational Rankings Annual* (DM)

*College Blue Book* (DM)

*Directory of Post-Secondary Institutions* (DM)

### Salary Information

*Colorado Occupational Wages*  
(<http://www.coworkforce.com/lmi/wages/wages.asp>)

*Compensation & Working Conditions* (DM)

*NACE Salary Survey* (CS)

Salary.com - <http://Salary.com>

### Alumni Career Network

One of the best resources for career information is people who work in the field you are considering. Contact information for Regis Alumni who have agreed to talk with students investigating career fields is available on the Alumni Career Network, a program located under "Alumni" at <http://www.ecampusrecruiter.com/regis>

### World Wide Web Sites

Regis Career Services: <http://www.regis.edu/careerservices>  
Dayton Memorial Library article and research database:

<http://www.regis.edu/libdatabase.asp?sctn=lib&p1=empty>

JobWeb (NACE): <http://www.jobweb.org>

Career Magazine: <http://www.careermag.com>

America's Job Bank: <http://www.ajb.dni.us>

