Computer Science

Your Careers Adviser Helen Vahey

T+353 1 402 3109 E helen.vahey@tudublin.ie



Skills developed in college

You've developed a range of skills through your education, work experience and personal interests and achievements.

Understanding what skills you have to offer and like to use can help you understand what you want in a career, as well as providing key information for job or further study applications.

In terms of securing a job, academic qualifications alone will not guarantee success. Evidence-based skills sections on your CV can demonstrate the broad range of qualities you have to offer employers.

Opposite are some of the main skills you may have developed while in college:

Communication skills, both verbal and written

Expressing ideas effectively and conveying information appropriately and accurately. Influencing others by expressing self effectively in a group and in one to one situations. Showing a range of verbal and nonverbal signals that the information being received is understood.

Teamwork/working with others

Working effectively and confidently within a group to achieve a common goal or task. Including understanding your role within the team, and listening and supporting other team members.

Problem-solving ability

Identifying, prioritising and solving problems, individually or in groups; possessing the ability to ask the right questions, sort out the many facets of a problem, and contribute ideas as well as answers regarding the problem.

Time-management skills/ability to meet deadlines

Managing several tasks at once; being able to set priorities and to allocate
time efficiently in order to meet deadlines.

Planning and organising

Establishing a course of action for self and/or others to accomplish a specific goal. Planning proper assignments of personnel and appropriate allocation of resources.

Leadership skills

Motivating and taking responsibility to lead other people, in order to achieve set goals and objectives.

Initiative & self-management

Identifying opportunities and being proactive in putting forward ideas and potential solutions. Self-disciplined and self-motivated, in the pursuit of studies and professional practice.

Ability to make quick decisions/work under pressure Making decisions and taking action. Maintaining performance under pressure and/or opposition.

You may also have developed a wide range of technical/specific course related skills

Types of employers/industry sectors

Some of the main types of employers/industry sectors in which Computer Science graduates work include:

- Software and Hardware Companies (Building blocks e.g. Intel, AMD, Analogue Devices, Integration e.g. Ericsson, Applications)
- Contractors
- Technical and Business Consultancies
- Banks/Financial Institutions
- State and Semi-state bodies
- Telecom Providers, Consultancies
- R+D companies, IOTs, Universities, Research depts, Start-ups
- Energy Technology and Software Development
- Education/Training Bodies
- Computer Gaming Companies
- Medical diagnostic and monitoring equipment
- Commercial, Industrial and Public Sectors
- Offices, Retail Units, Hotels, Sports and Leisure Centres, Community Centres, Healthcare/Hospitals, Pharmachem, Food and Agri, Electronics, Local Authorities, Third level Institutions, Waste and Water Pumping, Small and Medium Enterprises, Defence Forces, Broadcasters, Telecommunication companies, Petrochemical industries
- Transport Organisations including road and rail networks, Electric and Hybrid Vehicles
- Energy Utilities, Suppliers and Providers:
- State Utilities, Gas/Electrical Suppliers, Independent Power Producers, Energy Service Companies, Local authorities, Renewable Energy Developers, State Utilities, Agents and Distributors, Original Equipment Manufacturers
- Government Agencies/Voluntary/NGOs/Professional Associations
- Self-employed/Start-ups

For sector information see: www.gradireland.com
www.careersportal.ie
www.prospects.ac.uk
www.targetjobs.co.uk

Career options with your course

Some of main occupations and job profiles secured by Computer Science graduates include:

- Android / IOS Developer
- Animator
- Business Systems Service Engineer
- Cloud Specialist
- Computer / IT Support Specialist
- Computer / Software Sales
- Computer Programmer
- Computer Scientist
- Computer System Administrator
- Computer Systems / Business Analyst
- Computer Systems Sales Specialist
- Computer Systems Technician
- Computer Trainer
- Cyber Security Specialist
- Data Analyst
- Data Change Agent
- · Data control Specialist
- Data Manager
- Data Protection Specialist
- Games Designer / Tester / Programmer
- Information Systems Manager
- IT Consultant
- IT Manager
- IT Project Manager
- IT Research and Development Assistant
- Network Administrator
- Network Engineer
- Quality Assurance Engineer / Specialist / Analyst
- Software Developer
- Software Engineer
- Software localistation
- Software tester
- Technical Author
- Telecoms Engineer
- Web Designer / Developer / Master

For occupational information see: www.gradireland.com

www.gradireland.com www.careersportal.ie

www.prospects.ac.uk

www.targetjobs.co.uk

Employers who have recruited in your area

Some of the companies who have recruited Computer Science graduates:

- Equifax
- **EUROSS**
- Gardai Representative Association

- Maithu IT Solutions
- MOLA
- Net Scout
- Open Net
- SAP
- SAS
- S.A.T.
- Swift Queue
- 3.V.
- **Beauchamps Solicitors**
- BOI
- Doon
- **Dunnes Stores**
- I.B.M K.B.C Bank

Job Hunting

It is important that you access both the advertised and hidden jobs market and use any and every means available to you to job hunt effectively.

Advertised Jobs

Most University and IT Careers Services have jobs listings on their websites:

www.tudublin.ie/jobscene

Graduate programmes and immediate vacancies

www.prospects.ac.uk & www.targetjobs.co.uk http://www. gradcracker.com/engineering-jobs

Graduate jobs UK

www.gradireland.com

Immediate jobs/Summer/Graduate programmes

www.mondotimes.com

Local and national press

- www.publicjobs.ie
- www.localgovernmentjobs.ie

Public service

www.irishjobs.ie/agencies

Complete list of recruitment agencies/online recruitment sites

- Company websites
- Job websites indeed.ie, irishjobfairy (twitter), irishjobs.ie, digitalmarketingjobs.ie, digitalmediajobs.com, careerjet.ie, alternativesdigital.ie, simplyhired.ie, gamesjobsireland.com, prosperity.ie, gamedevelopers.ie, computerjobs.ie, monster.ie, mobiledev (facebook), etc.

Other

- Careers fairs Gradireland Fair Autumn and Summer Fair, plus many
- Notice boards/Student email account/Lecturers
- **Company Presentations**
- Specialist Magazines & Publications, e.g. Technology Ireland, Irish Software Association newsletter, Enterprise Ireland, Engineers Ireland

Voluntary Sector/Charities

www.activelink.ie

Voluntary Sector/Charity/NGO vacancies in voluntary sector

www.volunteeringireland.com

www.dochas.ie

Association of non-governmental development organisations

www.comhlamh.org

Volunteering opportunities

www.wheel.ie/directory

Directory of voluntary and community organisations

Unadvertised Jobs

Networking

- Networking who is in my network? classmates, lecturers, alumni, family, neighbours, colleagues, clubs and societies, TU Dublin Career Development Centre, professional bodies
- Informational Interviewing/Shadowing
- College work projects, thesis, placement, guest speakers, student website
- Societies e.g. guest speakers/events
- Attend events, conferences, short courses, trade shows (e.g. professional bodies, etc), National Digital Conference, Dublin, businessandleadership.com (events), Digital Learning Festival - May, http://www.gamesfleadh.ie/expo/whats-on, cross industry events, i.e. TechBrew/ISIN events/Dublin start-up Commissioner, DubLUDO (game events), Codess (female coder events for women), Dublin Unity User group, etc.
- Meet up groups, e.g. 'Data Scientists Ireland' and 'Tech for good -
- Join Alumni Association/Linked-in TU Dublin Alumni group//Related groups on linked-in, e.g. digitalmediajobsnetwork
- Find a mentor/keep a job hunting record

Entrepreneurship

- Freelancing/Work experience/Self-employment/Start-Up
- http://www.dit.ie/careers/studentsgraduates/ interestedinselfemployment/
- TU Dublin Hothouse www.dit.ie/hothouse/
- Local Enterprise Office www.localenterprise.ie
- The Digital Hub www.thedigitalhub.com

Start Ups:

- Start-up companies www.startupdublin.com, dublinstartupjobs.com
- FDI and indigenous www.makeitinireland.com, www. itshappeninghere.ie
- https://angel.co/ start up jobs worldwide

Contact and Track companies

- Speculative applications + cold calling. Think about your offering
- Contact organisation with ideas (ways to reduce costs, make them more money, research project, Your Unique Selling Point – Think about your offering)
- Use directories –Kompass.com, professional bodies, e.g. acei.ie
 (Consulting Engineers), Irish Software Association, Irish Software
 Innovation network, www.techireland.org list of tech companies,
 http://www.thedigitalhub.com/companydirectory, www.mediastreet.
 ie Irish Media and Creative Business Directory, Irish Media Contacts
 Directory, Marketing Services Directory, Creative Ireland Directory
- First Destination Reports (where have previous graduates gone?) DIT Linked-in
- Check out industry award recipients Best Workplaces in Ireland (download on gradireland.com), Ireland's top 1000 companies, http://www.top1000.ie/companies Award recipients – Digital Media Awards (digitalmedia.ie) http://www.digitalmedia.ie/, Net Visionary Awards, Software Industry Awards, etc.
- Check out Labour Market trends, www.careersportal.ie, IDA (Industrial sectors), IBEC, www.dit.ie/careers (labour market news),
- www.siliconrepublic.com/topics/jobs-announcements
- Search newspaper business pages on-line to get success stories on businesses as they are growing – TU Dublin Careers website (labour market news)

Other proactive ideas

- Enter competitions / scholarships
- Get Work Experience / internship
- Social networking sites (facebook, twitter, LinkedIn, Facebook, Blog, Discussion Groups)
- Linked-In (set up a profile, link to others, search for companies employees who have
- Linked-in profiles, advertised jobs)
- Follow & target companies on facebook, linked-in, twitter

For more information on how to go about finding a job and job-hunting sites, <u>See www.tudublin.ie/careers</u>

Interviews

For more information on how to perform in interviews, <u>See www.tudublin.</u> ie/careers

CVs/Cover letters and applications

For information on how to put together a great CV/Cover Letter or Application, <u>See www.tudublin.ie/careers</u>

Useful websites for your course:

Related Professional bodies/Associations: Members, training, events, opportunities, news

- www.iia.ie -Irish Internet Association
- www.ics.ie Irish Computer Society
- www.ictireland.ie ICT Ireland
- www.bcs.org Chartered Institute for IT (British)
- · www.iap.org.uk/main Institution of Analysts and Programmers
- www.iia.ie- Irish Internet Association
- www.icad.ie Institute of Creative Advertising and Design
- www.theesa.com Entertainment Software Association (US)
- www.ukie.org.uk Trade Body Games/Entertainment (UK)
- www.tiga.org Games Industry UK
- www.i-cando.ie/ Global Digital Skills Foundation
- www.iei.ie Institute of Engineers in Ireland CV posting
- www.software.ie Irish Software Association
- · www.nsd.ie/htm/ National Software Directorate
- www.iet.org.uk The Institution of Engineering and Technology
- www.iie.org.uk The Institution of Incorporated Engineers (IIE)
- www.cibse.org Chartered Institute of Building Services Engineers
- www.acei.ie Association of Consulting Engineers of Ireland (ACEI)
- www.engc.org.uk Engineering Council UK
- www.graduateengineer.com Engineering website for students

Forums – http://www.techrepublic.com/forums/, digitalmediaforum.net, forums.frontier.co.uk, Irish Games facebook page, Irish Computer Society forum, technology-ireland.ie forum, etc.

Examples of Linked-in discussion groups – Computer and Software professionals, Research Methods for software engineering and computer science, Electrical/Electronics and Computer Development, etc.

General websites:

- Worldwide Media guide www.mondotimes.com
- Yellow and White pages directories from around the world www.superpages.com/global/
- Specialists in Student Travel www.usit.ie

Further Study

Are you considering further study or training? See <u>www.tudublin.ie/careers</u> for comprehensive information

Some examples of further study programmes undertaken by Computer Science graduates:

- MSc Business and Entrepreneurship, TU Dublin
- MSc Interactive Entertainment Media, TCD
- MSc Computing, TU Dublin
- MSc Applied Software Technology, TU Dublin
- PhD Computer Science, TCD
- MSc Cyber Security, TU Dublin
- PhD Visual Analysis, TU Dublin

Conversion courses

Some graduates find that their primary degree did not meet their expectations, either vocationally, academically or personally, and seek change career direction. Conversion courses offer the opportunity to diversify into another chosen career area while meeting the necessary entry requirements for that discipline. However, it should be noted that this is not the case for all disciplines e.g. disciplines such as science and engineering will require an undergraduate degree in that discipline.

Careers open to all disciplines (Including 'Paths Into...' Series)

Many graduate vacancies don't require specific degree subjects as possession of a degree is taken as evidence of intellectual ability. What is more important to the potential employer is the range of transferable skills and experience you can demonstrate.

Many graduate training programmes take final year students from a wide range of disciplines, register with the Career Development Centre's Jobsence for a full list of programmes. Here is a range of career areas that are potentially open to graduates of all disciplines. It's important to note that some of these options may require further study either on the job or beforehand.

If you are considering diversifying or changing career direction a postgraduate conversion course may be a viable option.

Some examples of career areas open to students of all disciplines:

- Teaching & Education
- Financial Services & Accounting
- Marketing, Advertising and PR
- Retail, Sales and Customer Service
- Banking, insurance and financial services
- Charities and voluntary sector
- Fund management / administration and investment banking
- Human resources, recruitment and training
- Management consulting
- Management, business and administration
- Media and publishing
- Public sector and civil service
- Social, community and youth

For further information see: www.gradireland.com/career-sectors

Self Employment

Ever thought of being your own boss? Think you have an innovative product or service idea that could have commercial value? Want to commercialise your research? See www.tudublin.ie/careers

Other Options (e.g. Time out, travel etc.)

Volunteering and working with communities with is a great way to gain valuable real world experience, to develop new skills, to meet new people, to do something worthwhile and to improve your employability. For more details, see www.tudublin.ie/careers.

Labour Market Information

For information on the latest labour market trends see www.tudublin.ie/careers.

Additional Information/Advice

For any query you might have, please do not hesitate to get in touch with us.

Disclaimer: TU Dublin Career Development Centre offers advice in good faith on the basis of the best information available. The Centre accepts no responsibility for decisions made by individuals based on such advice.