

Scientific Communication CITS7200

Computer Science & Software Engineering

Lecture 12

Writing an academic curriculum vitae

1 The academic CV

The purpose of a CV is to list your qualifications for a job. Different professional areas require different styles for the CV, so it is important that you find out which style is appropriate for the job you are targeting. An academic CV is especially stylized and therefore relatively easy to prepare.

The academic CV might appear as a highly impersonalized document; it is. In academia, people are hired solely on the grounds of their qualifications, so personal hobbies and character eccentricities are irrelevant. However, for many of you the first job may not be an academic one, so this lecture will cover methods for constructing your first CV, and how it would be modified over the years if you go on to an academic career.

Although CVs look like nothing else in the world and thus hardly need a heading, it is common to head your document with the words *Curriculum Vitae* or *Résumé*. As an alternative, and as a way of maintaining some privacy regarding the contents of your CV, you can have a cover page with the heading

Curriculum Vitae
of
Your name here
date

The date can be useful in ensuring that your CV is actually the current version.

2 Personal details

Begin by giving your name. On an academic CV this should be the form you use for all your publications. Give your current position and mailing address, including the telephone number, fax number, email address, your home page address, as well as your residential address and telephone number. Do not use your parents' address unless you live with them.

Example

Name	Augusta Ada Byron
Home address	115 Ashley Court Somerset, U.K. Phone: +44 865 65378
Current mailing address	Department of Computer Science Somerset University Phone: +44 865 65987 Fax: +44 865 65432 Email: ada@cs.somerset.ac.uk Home Page: http://www.cs.somerset.ac.uk/~ada

If you are currently working in a non-academic job, only list your home address unless your current job is academically prestigious and your current employer knows you are looking for a job.

Do not include any titles with your name as it only looks pretentious.

Example

†Lady Augusta Ada Byron, Countess of Lovelace, BA, MA, PhD.

Make your academic address the minimum necessary to reach you.

Example

Not

Arnold Schwarzenegger
Robotics and Vision Research Group
School of Computer Science & Software Engineering
Faculty of Engineering, Computing and Mathematics
The University of Western Australia
35 Stirling Highway, Crawley,
Western Australia, 6009.
Australia.

but rather

Arnold Schwarzenegger
School of Computer Science & Software Engineering
The University of Western Australia
Crawley, W.A. 6009.
Australia.

It is no longer necessary to include any personal information on your CV whatsoever. Your date of birth, gender, marital status, and race are irrelevant to your qualifications and should not form part of the employment criteria. Of course, some of these things will come to light if you get as far as the interview, but this information need not be volunteered on your CV. However, your residence status within the country of application probably *is* relevant.

3 Education

Your first CV should include your high school education and your tertiary education. However, once you have obtained a postgraduate degree, or once you have already established your career with a significant position, your school education will drop off your CV.

In this section, list the name of your school and your TEE subjects. Give your TER score and annotate it as a percentile.

Example

1989 – 1993 Mudgee Senior High School

TEE subjects English
 Mathematics
 Physics
 Biology
 Computing

TER 95.60 percentile.

Also list in this section any prizes or scholarships you may have won whilst at school. Include all honorary posts such as captaincies of the debating team or of a sports team.

At the end of your first degree, your CV should contain the details of that degree. However, as you progress further through academia, these details will drop off.

Example

Bachelor of Computer and Mathematical Sciences with Hons (1st Class), 1997

The University of Western Australia

Double major in Computer Science and Information Technology Systems

Honours thesis entitled “Formal Methods for Proving the Correctness of Hardware Designs”.

Courses included

Functional Programming	A
Data Structures	A+
Algorithms	B+
Software Engineering	B
Logic Programming	A
Scientific Communication	B

Please see the attached academic record.

After you have more than one degree, simply list your university degrees with the dates of conferment and the granting institutions.

Example

BSc 1988, The University of Western Australia
MEng 1990, The University of Adelaide
PhD 1994, Massachusetts Institute of Technology

Abbreviate the names of your degrees unless they are unfamiliar to the reader. Thus, use PhD rather than Doctor of Philosophy, but spell out a Bachelor of Computing and Mathematical Sciences, rather than saying BCM.

List any honours with your degrees.

Example

BSc 1st Class Honours 1994, The University of Western Australia.

To indicate the breadth of your background, append informal titles to your degrees.

Example

BA (Information Management) 1990, James Cook University.
PhD (Computer Science) 1993, Griffith University.

There is no point adding such information though if your career has been absolutely standard throughout and you are applying for a job in your field of expertise. Nor is there any need to repeat the same institution for contiguous degrees.

Example

Not

BSc (Computer Science) 1988, The University of Western Australia
MSc (Computer Science) 1990, The University of Western Australia
PhD (Computer Science) 1994, The University of Western Australia.

but rather

BSc 1988, MSc 1990, PhD 1994, The University of Western Australia.

Designations in computer science usually coincide with the title of the thesis component of the degree. If this is the case, it should be mentioned.

Example

BSc Honours (Computer Science) 1995, Melbourne University.
Thesis entitled *On the NP-hardness of Graph Isomorphisms*.

If you are right on the verge of receiving your degree you may list it:

BSc 1996 (expected), The University of Western Australia.

But make sure that your referees are likely to back up your claims that the degree really is expected. Employers will not be impressed with empty wishes.

For universities with several campuses, indicate which one you attended:

BA 1992, Edith Cowan University at Mt Lawley.

Apart from your formal tertiary education, you can also describe any additional schooling that is relevant to the post you are seeking.

Example

The University of Adelaide, Summer Linguistics Programme, 1987.

But what if you started off thinking you wanted to be a doctor, did two years of medicine, changed your mind, took a year off, then did a science degree majoring in computer science? This should be included in your CV because it accounts for the fact that you obtained your degree later than your peer group. Such a history is entered on your CV as:

The University of Western Australia, undergraduate work in medicine,
1987-89.

However, once you are well-established in your career, such a false start need no longer be mentioned.

4 Scholarships and Prizes

List here all the scholarships and prizes you have obtained from university on. If it is a CV for your first job after university, you might also want to mention any prizes or exhibitions you won at the TEE level, but such items will quickly drop off an academic CV.

As you continue your academic career, you can drop some of the earlier honours, but towards the end of your career as you pick up Honorary Doctorates, Fellowships in the Academy of Sciences, or National Book Awards, you add such items to this section of your CV.

Example

Shell Scholarship for Honours, 1992.
Gowrie Scholarship for undergraduate studies, 1989–1991.
Computer Science Bursary, 1992.
Exhibition medal for top programmer, 1991.
Rhodes Scholarship, 1993–1996.

5 Professional experience

Every part of your CV requires constant re-examination and evaluation, but none more so that this section. When looking for your first post, you will list streams of information about your professional experience that will disappear once you have been hired. From then on, no single transformation will be so great, but you should always strive to compress this information, to give a global overview of your career to date.

For your first job, you should drag out whatever relevant experience you can. This will include any teaching you have done, and any work that bears some relationship to your field. Here are some typical examples that might appear in this section:

Teaching Assistantships

†The University of Western Australia. Teaching assistant in Computer Science 101, 1993–94; laboratory assistant in Computer Science 102, 1994.

The University of Western Australia. Teaching assistant in Pascal Programming, 1993–94; laboratory assistant in functional and logic programming, 1994.

Research Assistantships

Curtin University. Research assistant in communication networks, 1992–94.

Teaching at School Level

Scotch College. Computing tutor for boarders, 1989.

Note that this section can also include voluntary work:

The Mabo Project. Tutoring in word processing, summer 1993–94.

You might also want to list relevant business or industry experience, even if you are not sure that it is directly relevant to the post you are seeking:

Alcoa. Assistant manager for quality control, summer 1990–91.

Gather all the items you can think of and arrange them in chronological order by earliest date, then try to consolidate the list so that it doesn't look too bitsy or too long.

†University Computing Services. Data entry, evening 1987–88.

Fremantle Press. Proof reading and copy holder, summers 1989–92.

United Methodist Bookmobile, Perth. Volunteer, 1991.

The University of Western Australia. Laboratory assistant, some casual tutoring and marking; in various courses in computer science, 1st semester 1992, 1st and 2nd semester 1993, summer term 1994–95.

Women's Refuge Centre. Voluntary reading programme supervisor, 1989–91; child support leader, 1992.

University Computing Services. Research database project programmer, 1993.

This is so badly constructed that it is difficult for an employer to work out exactly what you have done. Trim it down to produce a tighter version:

Fremantle Press. Proof reading and copy holder, summers 1989–92.

The University of Western Australia. Teaching assistant in Pascal Programming, Data Structures, and Algorithms. 1992–94.

University Computing Services. Research database project programmer, 1993.

Notice the alterations to the UWA work — specifics about the courses are significant; specifics about the semesters are not.

Once you have been hired for your first academic position, many of these items will disappear from your CV.

5.1 Courses taught

If you are applying for an academic position then your teaching experience is very important. In this section you should list all the courses you have taught, even those that are outside your main field of expertise. If you are applying for a job in another country, you might like to explain what the actual duties of a Teaching Assistant, a Demonstrator, or a Course Controller are. If you have won awards for your teaching, or received exceptional student evaluations, these could be mentioned in this section. Give an indication of the course level, and the class size.

Example

Pascal Programming for 1st years. Teaching assistant, 1991. Approximately 300 students.

Artificial Neural Networks, Honours level. Course controller, 1992. Nominated best honours course by the honours students. Approximately 20 students.

5.2 Theses supervised

As your academic career progresses, your experience at supervising postgraduate research work becomes more important. In this section you should list

the names of the students you have supervised, and the research project or thesis title. Normally, this section would include only MSc and PhD theses, although if your only experience is supervising a small number of Honours level students, this information should be included.

Example

Matthew Binford, PhD. *Obstacle Avoidance in Projective Hyper-space*, 1992.

Lisa Tang, PhD. *Evolution and Network Optimization*, 1993.

Hugh Kovic, MSc. *Parallel Algorithms for Searching and Sorting*, 1993.

6 Professional affiliations

In this section, list professional memberships relevant to the post you are applying for, not the West Australian Football Club or Rotary. Give no dates except for offices. List only current memberships.

Example

Australian UNIX Users Group.

UWA Student Computer Club; president 1991–93.

IEEE Student member.

7 Administration

As with teaching experience, administrative experience is an important component of an academic CV. In this section you should list any administrative duties you have undertaken as part of your professional experience.

Example

School Systems Administration Committee. Student representative, 1993.

Student Guild Computing Committee. Member of the scholarships subcommittee, 1992.

Computer Science & Software Engineering, UWA. 1st year coordinator for the laboratory roster, 1995.

8 Professional activities

Professional activities in the academic arena include things like refereeing journal articles, serving on the editorial board of a journal, organizing conferences, examining Masters and PhD theses, liaising with the media about research progress, assessing grant proposals, doing book or product reviews for professional magazines, liaising with schools particularly on points of curriculum, and serving on national committees. Any activities you have undertaken of this form should be listed in this section.

9 Publications

Elsewhere in your CV you may, within limits of honesty, expand or contract information. But your publication list must be complete and uncensored. Not one publication from your professional career may be omitted — not even if you have changed your opinion or realized there was an error in a previously published work.

Only what you have written outside your academic field may be ignored. For example, if you write science fiction essays or detective novels, then these should not appear on your CV. List your publications in the same format as you would in the reference section of a paper you write, that is, authors' names, title of work, publications details, and the date of publication. Arrange works in chronological order, with the earliest works appearing first, and then alphabetically within each year. It is common to subdivide your publications into the following categories: *books*, *refereed journal articles*, *refereed conference papers* and *technical reports*.

Never list the same item more than once. If it has appeared in two separate publications, then list the item as follows:

James Stewart. Probability theory and robot path planning. *The International Journal of Intelligent Robotics*, Vol. 4, No. 1, 223–245, 1992. Reprinted in *Robotics Science*, edited by Eric Brooks, Pergamon Press, 1993.

The rule against doubling-listing carries through a change of title if the work is essentially the same:

Kelly Peters. *Network Topologies in Finite Projective Spaces*.

PhD thesis, Columbia University, 1992. Published as *Networking in the 90s*, MIT Press, 1993.

If you carve your thesis up into several papers, then each gets a separate listing.

Do not number the items on your publication list. Whoever is reading your CV should be more concerned about the quality of the publications, not the quantity.

If you have a paper that has been accepted for publication, and you are awaiting its publication without further revisions, list the item as *In Press* or *accepted for publication in*.

Any publication less further advanced than this, for example, papers that have been submitted but for which you have not yet received a verdict, or working manuscripts, do not strictly speaking belong to your publication list. Such papers can be listed under a separate section, say *Papers in preparation*, but should not be embedded in your publication list.

10 Grants

Under this section you should list all the grants, fellowships, and faculty awards you have received, with opening and closing dates:

Faculty of Engineering and Mathematical Sciences Development
Grant for the investigation into functional data types, \$5,000,
1992.

ARC Small Grant for the Logic in Scheme project, \$15,000 *per*
annum, 1991–94.

If the grant you hold is renewable, mention it. If you hold a renewable grant that wasn't renewed, only mention the grant for the time that you held it.

11 Computing skills

Many computer science students forget to enumerate their saleable skills! Employers, including universities, will be interested in what you can actually do. In computer science this will include your fluency in several languages,

your knowledge of different platforms, operating systems and programming environments.

Example:

I primarily specialise in MacOS systems consulting and programming. At the moment, I do casual consulting for various clients on MacOS systems to resolve problems in the OS, applications and hardware. I also do programming for various projects based on the Internet in various languages such as Java and C/C++.

Operating Systems	MacOS, Windows/NT, MS-DOS, AmigaOS, Unix
Programming	Pascal, Ada, PL/SQL/ C/C++, Java, SQL and others
Database	Oracle
Networking	AppleTalk/AppleShare, Novell Netward, TCP/IP

12 Other interests

It is not unusual to list some of your other interests in life, although this item will also disappear from your CV as you advance in your career. Typical examples of entries here could include interests in sport, music, theatre, reading or traveling. Be sure to include any aspects of these activities that might be relevant to your application, for example, coaching or teaching activities, administrative posts in clubs, aspects of your activities that indicate good organisational or communication skills.

Example

Writing. I enjoy writing and act as the editor of the student club magazine, entitled HobBITS. We produce four issues each year, circulated to all undergraduates in Computer Science, and addressing topics such as new software and hardware products, reviews of papers presented at the annual Turing Award, ethical, social and gender issues in Computer Science, and other articles such as reviews of our club activities, a For Sale column, etc.

Chess. I am a State Champion Chess player and have represented both UWA and WA in 4 national competitions, and Australia once in an international competition (I finished 5th in the under 20 year old section).

13 Referees

Never list someone as a referee unless you have obtained his or her permission beforehand. However, your thesis supervisor has already agreed, by implication, to act as a supervisor, and should normally be listed in this section. Three referees is usual; never list more than four unless specifically required for the position. Give the names and addresses just as they would appear on the envelopes. Don't explain your relationship to these people; this will come out in their references.

14 Production of your CV

Produce your CV using L^AT_EX or Word and print it on a high quality laser printer. In the area of Computer Science, anything less professional is unacceptable.

Each time you update your CV do not simply add more material. Re-think the whole document, and eliminate items that no-longer carry the same force. Your CV should mature as you do. If your CV is longer than one page, staple it across the top left-hand corner. Do not staple the covering letter to your CV.

15 Covering Letter

A covering letter should be short and to the point. State what position you are applying for or, if no post has been advertised, what you are looking for. Say when you will be available. If you have any outstanding qualifications to bring to the job then mention them, but don't repeat what is already in your CV. For many positions now you must address separately a list of Selection Criteria. Don't answer these points in the covering letter, but rather on a separate sheet, and make sure you answer *all* points. List in your covering letter all the attachments you have, for example,

Please find enclosed a copy of my Curriculum Vitae, my statement addressing the selection criteria for this position, a certified copy of my academic record, and a copy of my latest research paper.

Close the letter courteously. There is no need to be expansive or humorous at this stage.