

KARL PODESTA, B.sc.

References and personal details available on request / <http://www.redbrick.dcu.ie/~kpodesta/>

Academic

2002–2004 M.sc. (by Research) in Computer Applications, Dublin City University
“Partitioning Data: Analyses on a Cluster of Workstations”
Thesis due October 2004.

1998-2002 B.sc. (Hons) in Computer Applications, Dublin City University
Final Year Project: Parallel Analysis of Digital Video (A Grade)

Professional

2002 – 2004 *Research Assistant, National Institute for Cellular Biotechnology (NICB)*

- Maintained a 23-node Linux cluster, designed a commercially purchased system
- Gave parallelisation advice & support for researchers developing models of biological systems (development with UNIX shell scripts, MPI)
- Linux and cluster-based problem solving for Bioinformatics & Chemistry groups
- Design/Development of website for Modelling & Scientific Computing Research Group, and the Institute's website, www.nicb.dcu.ie

2001, 2002 *E-Commerce Software Developer, Mentec Intl., Dun Laoghaire*

- Development projects involving ASP, CSS, XML, XSL/XSLT, Javascript, Java
- Included projects for the Institute of Education, Coillte, OSI
- Troubleshooted in-house CSS problems in current and legacy code

2000 *Technical Consultant, Horizon Open Systems, Eastpoint, Clontarf*

- Staging of Sun/Solaris based systems (Solaris Jumpstart)
- Developed log rotation scripts (perl) for launch of Esat's "DOL" ISP
- Installed telecoms systems used in the Sydney Olympics
- On-site work in Logica, Bank of Ireland, Citywest
- Development of intranet website

2000 *Contract Web Developer, Logica Mobile Networks, IFSC, Dublin*

- Development of an intranet website for Supply Line Management division
- Some scripting of an internal CGI calendar and news section

1999-2000 *Technical Support Representative, AOL Bertlesmann, Eastpoint, Clontarf.*

- Troubleshooting home user technical problems (dialup, networking, application) over the phone, in a busy call centre

Technical Skills

Good programming (C, C++, Java), web development (HTML, CSS, ASP, XSL), scripting (Unix shell, Perl), system administration (Linux, Solaris, FreeBSD) skills. Past experience includes system maintenance (Sun, x86), web server administration (Apache). Notable experience with Beowulf clusters (design, administration, and programming) used for computational purposes, particularly for bioinformatics and software modelling of biological systems.

Publications

2004 **Podesta, K.**, Crane, M., Ruskin, H.J.: “A sequence-focused parallelization of EMBOSS on a cluster of workstations”. International Conference on Computational Science and its Applications (ICCSA 2004), Assisi, Italy. Lecture Notes in Computer Science, Springer, Vol. 3045, pp 473-480.

Awards

2002 Gold Award (“for outstanding achievement in extracurricular activity”), Uaneen Awards (Autumn Graduation), Dublin City University

2001 Best Society in Ireland (Networking Society, Chairperson), Board of Irish College Societies (BICS) Awards, held at Dublin City University

2001 Best Individual (First Fives), Best Society (Networking – Chairperson), Clubs & Societies Awards, Dublin City University

1998 Student of the Year (Graduation), Ardscoil Ris, Griffith Avenue, Dublin 9

Volunteer

2003 PRO (Founding Committee) Postgraduate Society, Dublin City University

2003 Technology Volunteer, Special Olympics World Games, Ireland

2002 Societies Executive Committee (SPC), Dublin City University

2001 Chairperson, Networking Society (Redbrick), Dublin City University

2000 Webmaster, Networking Society (Redbrick), Dublin City University

2000 PRO, Debating Society, Dublin City University

Activities

- (*Sep 2003*). Helped to organise a meeting of (and website hosting for) the Irish Association for High Performance Computing (IAHPC), at Dublin City University.
- (*July 2003*). Visiting worker (EMBOSS), Bioinformatics Division, Rosalind Franklin Institute for Genome Research, Hinxton, Cambridge, United Kingdom.
- (*May 2003*). Technical support, Conference of Applied Statistics in Ireland 2003, Mullingar, Co. Westmeath.
- (*April 2003*). Organised SEM-NET: DCU Semester Forum on Networking, Dublin City University (<http://semnet.redbrick.dcu.ie/>).
- (*Sep 2002*). SFI Funded Delegate, Meeting on the Extensible Terascale Facility (ETF, or 'TeraGrid'), National Science Foundation, Washington D.C., USA.
- (*Summer 2001*). Organised and participated in construction of a Linux Cluster for the School of Computer Applications, Dublin City University.
- (*Summer 2001*). Secured the largest sponsorship deal to a DCU society from Sun Microsystems (E450 server for Redbrick), and co-organised a press launch attended by An Taoiseach, Bertie Ahern.
- (*Summer 2001*). Organised 2 student society projects (out of a total 5) to be run on a donated IBM S/390 mainframe (Linux), in the School of Computing, DCU.
- (*Summer 2000*). Liaised with Access Office and Community Office to produce separate "open labs" for groups of school children at School of Computing, DCU.
- Have designed and implemented websites for NICB, Modelling & Scientific Computing Group, Conference on Applied Statistics in Ireland 2003, DCU Networking Society, DCU Debating Society, DCU Postgrad Society, DCU Executives for Clubs and Societies, Board of Irish College Societies, in addition to commercial projects associated with previous jobs.
- Tutoring experience on "Introduction to Programming" (First year, B.sc. in Applied Physics), "BioData Analysis" and "Biocomputing" (Bioinformatics taught M.sc.).