



Study on job offers in the ICT field in Spain
5th Edition, 2001-02

Summary of relevant data

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Dr. Luis Fernández Sanz

www.cc.uah.es/lufesa



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Characteristics

- Sample:
 - 246 job ads in national newspapers (on Sundays) in Spain from October 2001 to September 2002.
 - 461 job profiles/positions offered in job ads
- Definition of job profile: a specific candidate profile for a specific position of any type in the ICT field which can be assumed by computing professionals except:
 - Those which explicitly require other degrees or exclude computing people.
 - Sales work force without specific requirements of educational level.
 - Junior profiles for candidates without previous experience.
- Data do not allow inferring real employment vacancies but opportunities for candidates.
- Job ads are not investigated to check if they are adjusted to reality. However, those ones which arouse doubts about their correctness were not processed.
- Total number of job ads 246 with the following sources of information:
 - ABC newspaper: 160 (64,25%)
 - El Pais newspaper: 83 (33,33%)
 - Both (ABC and El Pais): 6 (2,40%)
- Ads written in:
 - Written in Spanish: 96,79%
 - Written in English: 3,21%

Sample data

Sector	# Profiles	% Profiles
Computing/IT services	198	42,95%
Computing/IT	45	9,76%
Finance	6	1,30%
Industrial	20	4,34%
Not known	21	4,56%
Education	13	2,82%
Transportation	4	0,87%
Technology (aerospace, etc.)	16	3,47%
Telco	29	6,29%
Government	24	5,21%
Retailing	7	1,52%
Tourism/entertainment	20	4,34%
Consultancy/services in general	23	4,99%
Assurance	1	0,22%
Publicity	2	0,43%
Editorial/media	9	1,95%
Internet	0	0,00%
Building/engineering	10	2,17%
Health/pharma	10	2,17%
Food/agro	3	0,65%

Table 1. Economic sectors for job ads

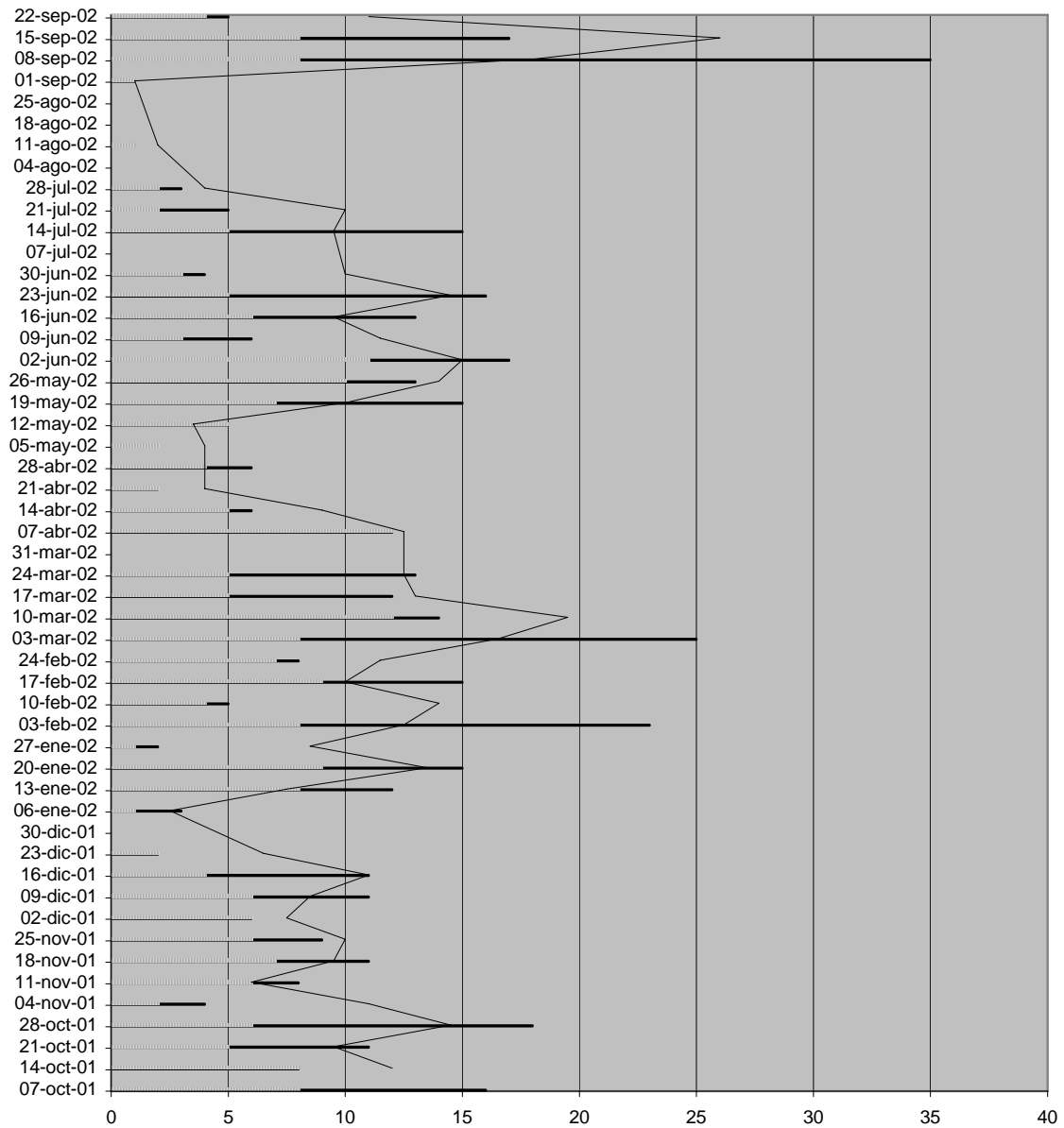


Figure 1. Yearly distribution

Positions:

- Basic level developers (programmers, developers, etc.): 84 (18,22%)
- Medium-level developers (analyst-programmer, etc.): 66 (14,32%)
- High-level developers (analysts, engineers, etc.): 78 (16,92%)
- Project leaders: 25 (5,42%)
- Consultants (all types and levels): 72 (15,62%)
- Basic-level systems area personnel (operators, support technicians, etc.): 62 (13,85%)
- Non basic-level systems area personnel (system administrators, engineers, etc.): 40 (8,68%)
- Specialists and technicians (all areas): 39 (8,46%)
- Managers (all areas): 40 (8,68%)

- No specific position described, just mention educational level (BS, higher graduate, etc.): 16 (3,47%)
- No specific name (area is mentioned or generic name is used such as expert, etc.): 16 (3,47%)
- Educators/trainers: 16 (3,47%)

Most mentioned specific positions:

- Programmer: 75 (16,27%)
- Analyst-programmer: 62 (13,45%)
- Analyst: 69 (14,97%)
- Systems technician: 36 (7,81%)
- Project leader: 25 (5,42%)

Technical requirements

Requirement	# 2001-2	% 2001-02	% 2000-1
SAP	48	10,41%	9,55%
Developer 2000	25	5,42%	5,90%
Lotus Notes/Domino	16	3,47%	6,46%
Reports, Forms (Crystal, Oracle,...)	12	2,60%	2,11%
Siebel	8	1,74%	1,12%
Client/server	7	1,52%	2,11%

Table 2. Environments, platforms and business applications

Requirement	# 2001-2	% 2001-02	% 2000-1
ORACLE	85	18,44%	24,44%
SQL Server	43	9,33%	11,66%
DB2	29	6,29%	10,96%
Database administration	27	5,86%	4,35%
SQL	22	4,77%	9,41%
Database in general	20	4,34%	5,20%
INFORMIX	14	3,04%	5,90%
IMS	12	2,60%	5,94%
PL/SQL	11	2,39%	3,51%

Table 3. Databases

Requirement	# 2001-2	% 2001-02	% 2000-1
Networking/communication	47	10,20%	7,02%
Internet/Intranet & Web	28	6,07%	10,81%
TCP/IP	26	5,64%	10,67%
CICS	21	4,56%	8,57%
Network administration and tools	16	3,47%	1,83%
LAN	16	3,47%	4,63%
Routers	15	3,25%	4,63%
WAN	15	3,25%	2,39%

Table 4. Communications

Requirement	# 2001-2	% 2001-02	% 2000-1
Hardware installation and maintenance	26	118,18%	13815,09%
PC	17	77,27%	23379,38%
AS/400	17	77,27%	43570,67%
Peripheral devices, printers, etc.	10	45,45%	2125,40%

Table 5. Hardware

Requirement	# 2001-2	% 2001-02	% 2000-1
Java	48	63,16%	21,91%
Visual Basic	46	60,53%	16,01%
C++	31	40,79%	14,89%
HTML	24	31,58%	13,90%
ASP	23	30,26%	12,22%
COBOL	22	28,95%	9,97%
Java Script	21	27,63%	12,64%
C	21	27,63%	11,52%
Visual C++	17	22,37%	6,32%
XML	13	17,11%	8,29%
Delphi	12	15,79%	2,53%
JSP Java	10	13,16%	5,20%

Table 6. Programming languages

Requirement	# 2001-2	% 2001-02	% 2000-1
Specific domain functional requirements	37	8,03%	1,97%
Application analysis	30	6,51%	2,67%
Project management	27	5,86%	4,49%
Application design	25	5,42%	1,54%
Development Methodologies	18	3,90%	2,11%
Web design	16	3,47%	0,14%
Designer 2000	14	3,04%	3,51%

Table 7. Software engineering methods, tools, etc.

Requirement	# 2001-2	% 2001-02	% 2000-1
Windows NT	66	14,32%	20,93%
UNIX	63	13,67%	22,89%
Windows2000	45	9,76%	5,76%
Systems administratio	29	6,29%	5,34%
Windows in general	24	5,21%	0,14%
LINUX	23	4,99%	4,78%
Solaris	22	4,77%	5,62%
MVS	14	3,04%	2,53%
OS/390	11	2,39%	0,98%
HP-UX	11	2,39%	2,95%

Table 8. Operating systems

Requirement	# 2001-2	% 2001-02	% 2000-1
Security(firewall, criptology, etc.)	28	6,07%	6,74%
ERP implementation	21	4,56%	2,11%
MS-Office	16	3,47%	4,63%
Help-desk	8	1,74%	0,98%
Storage and back-up	8	1,74%	0,00%
CRM	7	1,52%	3,23%

Table 9. Miscellaneous category

Non technical requirements

Requirement	# 2001-2	% 2001-02	% 2000-1
No requirements	217	46,97%	54,63%
Licenciado/Ingeniero en informática (Computing higher degree)	85	18,40%	15,59%
Higher graduates in general	63	13,64%	2,81%
BS in Computing	38	8,23%	6,88%
Speciality on computing (Physics gradutes, etc.)	35	7,58%	8,01%
BS in general	27	5,84%	1,54%
Vocational training education in computing	19	4,11%	4,92%
BS in Science in general	18	3,90%	4,92%
MBA	11	2,38%	0,28%
Microsoft certification	10	2,16%	1,83%

Table 11. Educational level

Requirement	# 2001-2	% 2001-02	% 2000-1
None	285	61,69%	59,13%
Fluent English	82	17,75%	17,70%
Wirtten English	81	17,53%	0,42%
High level of English	54	11,69%	9,27%
Technical English	25	5,41%	8,99%
German	10	2,16%	1,69%

Table 12. Language knowledge

Requirement	# 2001-2	% 2001-02	% 2000-1
Teamwork ability	27	12,98%	2,11%
Proactivity/dynamic attitude	17	8,17%	2,39%
Communication skills	17	8,17%	2,25%
Organization caopability/management	15	7,21%	0,00%
Learning ability	12	5,77%	0,00%
Team management	11	5,29%	0,00%
Customer orientation	10	4,81%	0,00%
Autonomy/independence	9	4,33%	0,00%
Analytic capability	8	3,85%	0,00%

Table 13. Soft skills and personal competences

Requirement	# 2001-2	% 2001-02	% 2000-1
Travelling	47	10,20%	8,29%
Residence close to company venue	25	5,42%	2,25%
Own vehicle	9	1,95%	2,81%
Driving license	8	1,74%	0,98%

Table 14. Other requirements

Work condition	# 2001-2	% 2001-02	% 2000-1
Non specified	140	30,37%	37,08%
Solid/growing/leader company	108	23,43%	13,90%
Wage to be negotiated according to experience, etc.	106	22,99%	17,98%
Opportunities for career development	97	21,04%	19,66%
High/competitive salary/compensation	80	17,35%	12,78%
Training (permanent, initial, etc.)	64	13,88%	19,38%
Integration in a consolidated team	48	10,41%	6,88%
Immediate start	43	9,33%	11,94%
Good working atmosphere	31	6,72%	3,09%
Stability/non temporal hire/permanent	30	6,51%	9,27%
Career plan	27	5,86%	0,00%
Interesting/high technology projects	22	4,77%	3,79%
Opportunities for promotion	20	4,34%	9,27%
Benefits (car, retirement funds, social,...)	19	4,12%	3,51%
Continuous working day	17	3,69%	0,14%
Venue in Madrid	10	2,17%	1,40%

Table 15. Working conditions offered