1996 CRA Taulbee Survey

Grad, undergrad student enrollments up

By Gregory R. Andrews
Chair, CRA Surveys Committee

The accompanying tables present the results of the 26th annual CRA Taulbee Survey[1] of Ph.D.-granting departments of computer science (CS) and computer engineering (CE) in the United States and Canada. Information was gathered during the fall and early winter. The tables include all responses received by the first week of February.

An innovation this year is that the survey could be submitted online or on paper. About half of the respondents used the online form for at least part of their input.

Information on degree production and enrollment applies to the previous academic year (1995-96). Information on faculty applies to the current academic year (1996-97). Faculty salaries reflect those in effect as of Jan. 1, 1997. Readers should keep in mind that survey results are from Ph.D.-granting departments only; there are hundreds more departments that only award bachelor's and master's degrees.

This article draws attention to the most significant results of the survey, especially results that are substantially different from last year.

The first notable difference is that the response rate was much lower (81% versus 91% a year ago). This is surprising, because we simplified the survey form and provided both hard copy and online versions. Part of the reason may be that we held to a firm deadline for responding. The major reason is probably that we made fewer follow-up calls than last year. However, the response rate is certainly high enough for the results to be meaningful.

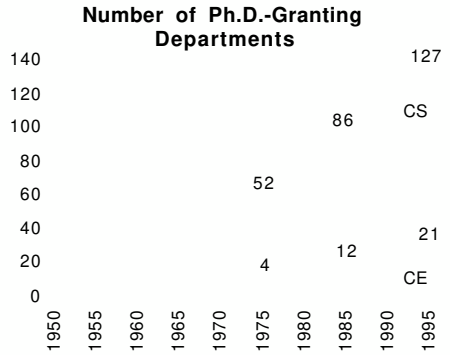
Degree production (Figures 1 and 2; Tables 1-7)

The tables and graphs show that a total of 915 Ph.D. degrees were awarded in 1996 by the 130 responding departments. We believe that about 100 degrees were awarded by the other 30 Ph.D.-granting departments. This estimated total of 1,015 degrees is down somewhat from last year. But as Figure 2 shows, Ph.D. production has been essentially flat for six years.

[1]*The title of the survey honors the late Orrin E. Taulbee of the University of Pittsburgh, who conducted these surveys for the Computer Science Board from 1970 until 1984.*

[2]*Although the University of Pennsylvania and the University of Chicago were tied in the National Research Council rankings, CRA made the arbitrary decision to place Pennsylvania in the second tier of schools.*

DEGREE PRODUCTION IN ACADEMIC YEAR 1995-96



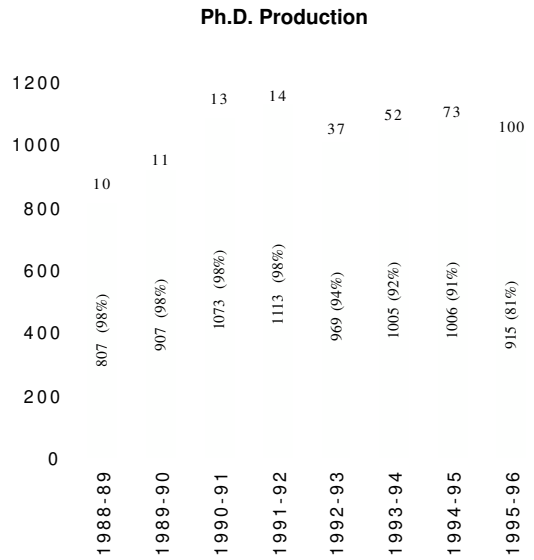


Figure 1 (above) shows a steady growth over time in the number of US and Canadian departments awarding CS and CE degrees. Actual numbers may be slightly higher because not all Forsythe schools completed their survey every year. **Figure 2** (right) shows a plateau in recent years in the total production of CS and CE doctoral degrees. To correct for the recent trend downward in the percentage of schools returning their surveys, the bottom bars show actual numbers reported, while the top bars project the numbers, assuming all schools had returned their surveys. Twelve schools did not return the survey in 1995; 30 did not respond in 1996. In the past three years there has been a more strenuous effort to include only CS and CE degrees in our data.

Table 1. Ph.D. Production by Ranking

	Ph.D.s Produced	Average per Dept.	Ph.D.s Next Year	Average per Dept.	Passed Qualifier	Average per Dept.
US CS Ranked 1-12	205	17.1	210	17.5	185	15.4
US CS Ranked 13-24	142	12.9	166	15.1	91	8.3
US CS Ranked 25-36	99	9.0	128	11.6	79	7.2
US CS Other	347	4.7	447	6.0	343	4.6
Canadian CS	83	6.9	93	7.8	57	4.8
US CE	39	3.9	66	6.6	123	12.3
Total	**915**	**7.0**	**1,110**	**8.5**	**878**	**6.8**

Table 2. Gender and Ethnicity of Ph.D. Recipients

	CS			CE			CS & CE		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
Nonresident Alien	253	30	283	32	4	37*	285	34	320*
African American, Non-Hispanic	10	0	10	1	0	1	11	0	11
Native American or Alaskan Native	4	1	5	0	0	0	4	1	5
Asian or Pacific Islander	113	17	130	12	1	13	125	18	143
Hispanic	19	5	24	2	1	3	21	6	27
White, Non-Hispanic	293	43	336	14	0	14	307	43	350
Other/Not Listed	22	2	24	0	0	0	22	2	24
Subtotal	**714**	**98**	**812**	**61**	**6**	**68***	**775**	**104**	**880***
Did Not Indicate	22	3	31*	2	0	4*	24	3	35*
Total	**736**	**101**	**843**	**63**	**6**	**72**	**799**	**107**	**915***

1996 CRA Taulbee Survey

Table 3. Gender of Ph.D. Recipients

	CS	CE	CS & CE
Male	736 (87%)	63 (88%)	799 (87%)
Female	101 (12%)	6 (8%)	107 (12%)
Total	**843***	**72***	**915***

Table 4. Gender of Bachelor's and Master's Recipients

	Bachelor's	Master's
Male	6,692 (80%)	3,318 (78%)
Female	1,336 (16%)	852 (20%)
Total	**8,411***	**4,260***

Table 5. Employment of New Ph.D. Recipients by Specialty

New Ph.D.s in Ph.D.-Granting Depts.	Artificial Intelligence/ Robotics	Hardware Systems/ Architecture	Numerical Analysis/ Scientific Computing	Programming Languages/Compilers	Operating Systems/ Networks	Software Engineering	Theory/Algorithms	Graphics/ Human Interfaces	Databases/ Information Systems	Other/Unknown	Total
Tenure-Track	23	5	3	11	15	9	11	1	5	12	95
Researchers	21	8	3	2	3	3	2	3	9	1	55
Postdocs	32	3	4	4	4	2	10	1	4	5	69
Instructors	4	1	0	1	4	2	2	2	2	5	23
New Ph.D.s, Other Categories											
Other CS/CE Dept.	8	2	1	3	3	1	3	0	1	3	25
Non-CS/CE Dept.	2	1	0	0	1	0	2	9	2	1	18
Industry	57	52	18	28	74	32	21	23	22	48	375
Government	3	1	5	0	1	0	1	3	4	6	24
Self-Employed	5	1	0	0	1	2	1	1	3	2	16
Employed Abroad	12	7	1	6	7	4	10	6	9	7	69
Unemployed	1	0	2	0	0	1	0	1	2	0	7
Other/Unknown	4	6	2	4	4	1	3	3	7	105	139
Total	**172**	**87**	**39**	**59**	**117**	**57**	**66**	**53**	**70**	**195**	**915**

Table 6. Ethnicity of Ph.D. Recipients

	CS	CE	CS & CE
Nonresident Alien	283 (34%)	37 (51%)	320 (35%)
African American, Non-Hispanic	10 (1%)	1 (1%)	11 (1%)
Native American or Alaskan Native	5 (1%)	0 (0%)	5 (1%)
Asian or Pacific Islander	130 (15%)	13 (18%)	143 (16%)
Hispanic	24 (3%)	3 (4%)	27 (3%)
White, Non-Hispanic	336 (40%)	14 (19%)	350 (38%)
Other/Not Listed	24 (3%)	0 (0%)	24 (3%)
Subtotal	**812 (96%)**	**68 (94%)**	**880 (96%)**
Did Not Indicate	31 (4%)	4 (6%)	35 (4%)
Total	**843(100%)**	**72(100%)**	**915(100%)**

Table 7. Ethnicity of Bachelor's and Master's Recipients

	Bachelor's	Master's
Nonresident Alien	626 (7%)	1,499 (35%)
African American, Non-Hispanic	207 (2%)	51 (1%)
Native American or Alaskan Native	12 (0%)	45 (1%)
Asian or Pacific Islander	1,029 (12%)	730 (17%)
Hispanic	182 (2%)	39 (1%)
White, Non-Hispanic	4,086 (49%)	1,387 (33%)
Other/Not Listed	110 (1%)	98 (2%)
Subtotal	**6,252 (74%)**	**3,849 (90%)**
Did Not Indicate	2,159 (26%)	411 (10%)
Total	**8,411 (100%)**	**4,260 (100%)**

STUDENT ENROLLMENT IN ACADEMIC YEAR 1995-96

Table 8. New Students in Fall 1996

	Bachelor's Full Time	Dept. Avg.	Master's Full Time	Dept. Avg.	Ph.D. Full Time	Dept. Avg.
US CS Ranked 1-12	2,037	185.2	596	49.7	280	23.3
US CS Ranked 13-24	1,014	92.2	325	29.5	217	19.7
US CS Ranked 25-36	1,051	95.5	177	16.1	147	13.4
US CS Other	7,275	97.0	1,679	22.4	560	7.6
Canadian CS	2,267	226.7	253	21.1	63	5.25
US CE	595	59.5	324	32.4	78	7.8
Total	**14,239**	**111.2**	**3,354**	**25.8**	**1,345**	**10.3**

Footnotes

All ethnicity tables: "Asian or Pacific Islander" includes people originating from the Pacific Islands, China, Japan, Korea, the Philippine Islands, Samoa, India and Vietnam; "White, Non-Hispanic" includes people originating from Europe, North Africa and the Middle East.

All tables with rankings: Statistics sometimes are given according to departmental rank. Schools are ranked only if they offer a CS degree and according to the quality of its CS program as determined by reputation. Those that only offer CE degrees are not ranked, and statistics are given on a separate line, apart from the rankings. In Table 1, the "Ph.D.s Produced" column shows the number of CS and CE degrees produced throughout the rankings. While CE degrees are mixed into all rank categories, there are no CS degrees in the CE category.

**Totals do not match:* The reader may find that totals from certain tables do not equal each other, even though theoretically they should. These discrepancies stem from inconsistencies in the way departments answered different questions. We tried to minimize this by calling departments that provided inconsistent answers.

Nonresident faculty: A small percentage of faculty were nonresident aliens when they were hired to work in fiscal 1996-97. In many cases, these new employees were gaining residency based on their new employment prospects.

All faculty tables: The survey makes no distinction between faculty specializing in CS versus CE programs. We tried to minimize inclusion of any faculty in electrical engineering.

Survey text from previous page

Production should hold steady next year as well, based on the predicted number of new Ph.D.s (Table 1) less the usual correction of about 150 for overly optimistic predictions by departments. Longer-range predictions are harder to make however: Enrollment of new Ph.D. students was down about 300 students last year, and about 100 fewer students passed their Ph.D. qualifying exam this year than last. On the other hand, enrollment of new Ph.D. students rose back to the level of two years ago (see next section).

Table 5 shows the areas of specialization and types of first appointments for last year's Ph.D. recipients. The table has been changed in two ways relative to last year. First, there are 10 columns for specializations rather than six, and the columns have more descriptive headings. Second, there are now several rows rather than just one for the positions taken by new Ph.D.s who were hired by Ph.D.-granting CS or CE departments. Despite these improvements, the number of unknown degree specializations and unknown types of first positions are much too large (10% to 20%).

1996 CRA Taulbee Survey

Table 9. Gender and Ethnicity of Enrolled Ph.D. Students

Enrollment by Gender	CS	CE	CS & CE
Male	5,407	381	5,788
Female	1,063	60	1,123
Total	**6,470**	**455***	**6,925***
Enrollment by Ethnicity			
Nonresident Alien	2,133	189	2,322
African American, Non-Hispanic	88	5	93
Native American or Alaskan Native	3	0	3
Asian or Pacific Islander	796	109	905
Hispanic	108	14	122
White, Non-Hispanic	2,726	120	2,846
Other/Not Listed	229	2	231
Subtotal	**6,083**	**439**	**6,522**
Did Not Indicate	387	16	403
Total	**6,470**	**455**	**6,925**

Table 10. Prior Education of New Ph.D. Students

	Bachelor's in CS or CE	% of Total
US CS Ranked 1-12	223 of 280	(80%)
US CS Ranked 13-24	89 of 217	(41%)
US CS Ranked 25-36	115 of 147	(78%)
US CS Other	325 of 560	(58%)
Canadian CS	55 of 63	(87%)
US CE	10 of 78	(13%)
Total	**817 of 1,345**	**(61%)**

Table 11. Master's Degree Candidates for 1996-97

	CS		CE		CS & CE	
US CS Ranked 1-12	625	(17%)	16	(3%)	641	(16%)
US CS Ranked 13-24	455	(13%)	3	(1%)	458	(11%)
US CS Ranked 25-36	279	(8%)	0	(0%)	279	(7%)
US CS Other	1,938	(54%)	142	(29%)	2,080	(51%)
Canadian CS	236	(7%)	0	(0%)	236	(6%)
US CE	85	(2%)	327	(67%)	412	(10%)
Total	**3,618**	**(100%)**	**488**	**(100%)**	**4,106**	**(100%)**

Table 12. Bachelor's Degree Candidates for 1996-97

	CS		CE		CS & CE	
US CS Ranked 1-12	1,169	(16%)	143	(11%)	1,312	(15%)
US CS Ranked 13-24	729	(10%)	226	(18%)	955	(11%)
US CS Ranked 25-36	617	(9%)	0	(0%)	617	(7%)
US CS Other	3,406	(47%)	592	(47%)	3,998	(47%)
Canadian CS	1,194	(17%)	0	(0%)	1,194	(14%)
US CE	113	(2%)	298	(24%)	411	(5%)
Total	**7,228**	**(100%)**	**1,259**	**(100%)**	**8,487**	**(100%)**

Survey text from previous page

We plan to investigate why in hopes of having more accurate data next year.

The number of bachelor's degrees that were awarded is up about 850 (more than 10%), which reflects a recent and continuing increase in the number of undergraduates majoring in CS/CE. However, the number of master's degrees awarded is about the same as last year.

The gender and ethnicity percentages remain relatively stable. The notable exception is that the number of master's and Ph.D. degrees earned by Native Americans or Alaskan Natives is way up—from three to 45 for master's degrees and from one to five for Ph.D. degrees.

Student enrollment (Tables 8-12)

To put it succinctly: Enrollments are *up*.

The number of new Ph.D. students rose from 1,072 to 1,345, which puts it back to the level of two years ago. The number of new master's students rose from 2,173 to 3,354, which is also about the level it was two years ago. Most dramatically, the number of new bachelor's students is up from 10,099 to 14,239, a 40% increase on top of last year's 5% rise!

The marketplace and the Web are clearly having effects. In fact, the increases are actually quite a bit greater than shown in Table 8, because 10% fewer departments completed the survey this year than last.

Faculty demographics (Tables 13-18)

Table 13 illustrates current and predicted numbers of full-time equivalent faculty members, with rows this year for different faculty ranks, including researchers and postdoctorates. We also include a table that presents faculty data by different groups of departments.

For some reason, departments are pessimistic about next year but then predict a slow growth back to this year's total number of faculty. By contrast, past surveys have always predicted growth and have been overly optimistic.

As expected, the gender and ethnicity percentages for faculty remain almost the same as last year. Of note, however, are the differences between percentages in Table 6 (ethnicity of new Ph.D.s) and Table 19 (ethnicity of newly hired faculty); a much

FACULTY GROWTH IN FISCAL 1996-97

Table 13. Anticipated Faculty Growth by Position

	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	Five-Year Increase	
Tenure-Track	2,371	2,226	2,243	2,312	2,320	2,398	27	(1%)
Researcher	257	253	268	280	292	297	40	16%)
Postdoc	226	210	219	227	235	243	17	(8%)
Instructor	256	200	201	203	204	200	-56	(-22%)
Other/Not Listed	100	62	65	64	66	66	-34	(-34%)
Total	**3,210**	**2,951**	**2,996**	**3,086**	**3,117**	**3,204**	**-6**	**(0%)**

Table 14. Anticipated Faculty Growth by Ranking

	1996-97	1997-98	1998-99	1999-00	2000-01	2002-02	Five-Year Increase	
US CS Ranked 1-12	456	455	448	480	464	495	39	(9%)
US CS Ranked 13-24	385	374	394	408	422	432	47	(12%)
US CS Ranked 25-36	301	259	278	291	311	319	18	(6%)
US CS Other	1,512	1,319	1,321	1,345	1,378	1,412	-100	(-7%)
Canadian CS	391	376	398	403	406	409	18	(5%)
US CE	165	148	157	159	136	137	-28	(-17%)
Total	**3,210**	**2,951**	**2,996**	**3,086**	**3,117**	**3,204**	**-6**	**(0%)**

Table 15. Ethnicity of Newly Hired Faculty

	Tenure-Track		Researcher		Postdoc		Other	
Nonresident Alien	12	(11%)	10	(29%)	15	(23%)	2	(3%)
African American, Non-Hispanic	0	(0%)	0	(0%)	0	(0%)	1	(2%)
Native American or Alaskan Native	1	(1%)	0	(0%)	0	(0%)	0	(0%)
Asian or Pacific Islander	21	(18%)	2	(6%)	9	(14%)	4	(6%)
Hispanic	3	(3%)	1	(3%)	3	(5%)	3	(5%)
White, Non-Hispanic	70	(61%)	21	(60%)	35	(54%)	43	(65%)
Other/Not Listed	5	(4%)	0	(0%)	2	(3%)	1	(2%)
Subtotal	**112**	**(98%)**	**34**	**(97%)**	**64**	**(98%)**	**54**	**(82%)**
Did Not Indicate	2	(2%)	1	(3%)	1	(2%)	12	(18%)
Total	**114**		**35**		**65**		**66**	

1996 CRA Taulbee Survey

Table 16. Gender of Newly Hired Faculty

	Tenure-Track	Researcher	Postdoc	Other
Male	95 (83%)	28 (80%)	56 (86%)	42 (64%)
Female	17 (15%)	7 (20%)	9 (14%)	13 (20%)
Total	**114***	**35**	**65**	**66***

Table 17. Ethnicity of Professors

	Assistant	Associate	Full
Nonresident Alien	27 (5%)	4 (0%)	5 (0%)
African American, Non-Hispanic	7 (1%)	9 (1%)	6 (1%)
Native American or Alaskan Native	1 (0%)	0 (0%)	0 (0%)
Asian or Pacific Islander	117 (22%)	173 (21%)	124 (12%)
Hispanic	12 (2%)	19 (2%)	25 (2%)
White, Non-Hispanic	315 (59%)	547 (66%)	772 (75%)
Other/Not Listed	15 (3%)	6 (1%)	10 (1%)
Subtotal	**494 (92%)**	**758 (91%)**	**942 (91%)**
Did Not Indicate	42 (8%)	76 (9%)	90 (9%)
Total	**536 (100%)**	**834 (100%)**	**1,032 (100%)**

Table 18. Gender of Professors

	Assistant	Associate	Full
Male	434 (81%)	750 (90%)	975 (94%)
Female	102 (19%)	84 (10%)	57 (6%)
Total	**536**	**834**	**1,032**

Table 19. Faculty Losses

	Total
Died	4
Retired	33
Took Academic Position Elsewhere	62
Took Nonacademic Position	44
Remained, Changed to Part Time	6
Other	16
Unknown	0
Total	**165**

Survey text from previous page

smaller percentage of nonresident aliens are hired into tenure-track positions than are awarded Ph.D.s. And a much larger percentage of white, non-Hispanics are hired into tenure-track positions than are awarded Ph.D.s.

Faculty salaries (Tables 20-28)

Faculty salaries again rose about 3% in all ranks relative to a year ago. (The overall averages in Table 20 are slightly higher than those reported in January.)

This year, salaries for newly reported faculty are listed by type of position (tenure-track, researcher, postdoctorate and other) rather than by groups of departments.

Rankings

For tables that group computer science departments by the rank of 1-12, 13-24 and 25-36, we based our ranking on information released in the 1995 assessment of research-doctorate programs in the United States done under the auspices of the National Research Council.

Our top 12 schools are Stanford University, the Massachusetts Institute of Technology, the University of California at Berkeley, Carnegie Mellon University, Cornell University, Princeton University, the University of Texas at Austin, the University of Illinois at Urbana-Champaign, the University of Washington, the University of Wisconsin at Madison, Harvard University and the California

FACULTY SALARIES IN FISCAL 1996-97

Table 20. Nine-Month Salaries, 98 Responses of 131 US CS Departments

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	413	$33,155	$53,353	$68,000	$55,360	$46,957	$57,847	$76,400
Associate	653	$37,871	$58,477	$82,500	$64,307	$52,404	$71,075	$100,750
Full	815	$39,300	$70,755	$95,000	$87,604	$61,721	$113,259	$200,000

Table 21. Nine-Month Salaries, 12 Responses of 12 US CS Departments Ranked 1-12

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	63	$50,500	$56,653	$64,700	$59,459	$58,000	$63,446	$76,400
Associate	75	$55,690	$62,052	$66,400	$68,474	$71,250	$77,244	$90,000
Full	165	$39,300	$70,431	$80,000	$95,957	$100,000	$134,507	$163,300

Table 22. Nine-Month Salaries, 11 Responses of 12 US CS Departments Ranked 13-24

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	44	$54,000	$56,553	$63,650	$58,348	$55,821	$60,862	$66,100
Associate	75	$54,247	$63,376	$72,450	$68,647	$67,000	$75,135	$91,150
Full	139	$61,911	$74,018	$89,600	$98,070	$111,600	$132,992	$200,000

Table 23. Nine-Month Salaries, 11 Responses of 12 US CS Departments Ranked 25-36

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	47	$53,000	$55,234	$57,770	$57,521	$55,825	$60,393	$65,500
Associate	63	$57,948	$61,989	$69,000	$67,158	$64,654	$72,902	$81,400
Full	89	$65,574	$73,625	$90,300	$91,233	$86,752	$121,499	$170,400

Table 24. Nine-Month Salaries, 69 Responses of 95 US CS Departments Ranked Higher than 36 or Unranked

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	259	$33,155	$52,131	$68,000	$54,029	$46,957	$56,259	$76,000
Associate	440	$37,871	$56,870	$82,500	$62,804	$52,404	$69,519	$100,750
Full	422	$47,871	$69,920	$95,000	$84,299	$61,721	$106,064	$176,300

Table 25. Nine-Month Salaries, 8 Responses of 13 US CE Departments

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums Min.	Mean	Max.	Avg. of all Salaries	Reported Salary Maximums Min.	Mean	Max.
Assistant	24	$49,396	$53,225	$58,976	$55,787	$54,461	$58,737	$65,000
Associate	56	$55,659	$59,357	$66,273	$64,928	$63,500	$70,861	$77,650
Full	55	$57,000	$72,124	$80,900	$85,460	$75,298	$106,945	$146,145

1996 CRA Taulbee Survey

Table 26. 12-Month Salaries, 9 Responses of 16 Canadian CS Departments (Canadian Dollars)

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums			Avg. of all Salaries	Reported Salary Maximums		
		Min.	Mean	Max.		Min.	Mean	Max.
Assistant	48	$42,000	$50,392	$60,000	$55,059	$49,189	$60,032	$69,370
Associate	100	$49,432	$59,476	$76,086	$69,720	$60,330	$80,266	$125,233
Full	118	$62,664	$75,451	$92,607	$89,951	$78,449	$111,564	$159,802

Table 27. Nine-Month Salaries, 106 Responses of 144 US CS and CE Departments

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums			Avg. of all Salaries	Reported Salary Maximums		
		Min.	Mean	Max.		Min.	Mean	Max.
Assistant	437	$33,155	$53,344	$68,000	$55,389	$46,957	$57,908	$76,400
Associate	709	$37,871	$58,543	$82,500	$64,353	$52,404	$71,059	$100,750
Full	870	$39,300	$70,868	$95,000	$87,427	$61,721	$112,738	$200,000

Table 28. Salaries for Newly Appointed Faculty, 17 Respondlng US CS and CE Departments

Faculty Rank	# Reporting Salary Data	Reported Salary Minimums			Avg. of all Salaries	Reported Salary Maximums		
		Min.	Mean	Max.		Min.	Mean	Max.
Tenure-Track	46	$45,000	$54,739	$82,500	$55,060	$45,000	$55,540	$82,500
Researcher	12	$35,000	$55,541	$71,412	$56,158	$35,000	$56,900	$78,288
Postdoc	24	$29,997	$37,921	$54,756	$39,607	$33,000	$41,482	$55,000
Other/Not Listed	25	$35,000	$42,871	$51,000	$45,152	$35,000	$47,430	$60,330

Survey text from previous page

Institute of Technology.

The departments ranked 13-24 are Brown University, Yale University, the University of California at Los Angeles, the University of Maryland at College Park, New York University, the University of Massachusetts at Amherst, Rice University, the University of Southern California, the University of Michigan, the University of California at San Diego, Columbia University and the University of Pennsylvania.[2]

The departments ranked 25-36 are the University of Chicago, Purdue University, Rutgers—the State University of New Jersey, Duke University, the University of North Carolina at Chapel Hill, the University of Rochester, the State University of New York at Stony Brook, the Georgia Institute of Technology, the University of Arizona, the University of California at Irvine, the University of Virginia and Indiana University.

Acknowledgments

Juan Osuna drafted the survey and prepared the online version. Phillip Louis collected data and handled follow-up e-mail and telephone calls. Andy Goldstein prepared the accompanying tables. Joan Bass coordinated production and layout.