

USER EXPERIENCE (UX) MATTERS:

What are the Most Desired Skills in the UX Designer and UX Researcher Job Ads?



INTRODUCTION

- ❖ According to a job skills report released by LinkedIn, “UX” is ranked as the number five most desired hard skill by the companies in 2019.
- ❖ The job title of “web designer” has been transformed into many different titles over the ten years.
- ❖ Human Computer Interaction (HCI) has become a hot program in many American institutions of higher education.
- ❖ Should mass communications programs adopt UX?



RESEARCH QUESTION

- RQ1:** What assets (design skill, major, degree) are expected in a) UX designer and b) UX researcher job ads?
- RQ2:** Which industry has the highest demand for a) UX designers and b) UX researchers in the ads?
- RQ3:** Which geographic areas (west, mid-west, south, northeast) have the highest demand for a) UX designers and b) UX researchers in the ads?
- RQ4:** How do the ads on UX designers and UX researchers differ in terms of degree requirements, geographic locations and academic majors?
- RQ5:** How do ads’ posting time, ads’ companies, and companies’ location influence the number of views of the ads?



STUDY DESIGN

- ❖ A content analysis of 200 job ads from LinkedIn was conducted ($N = 200$).
- ❖ Job ads were collected in August 2019 using the stratified sampling method.
- ❖ Three coders coded the same 20 ads with ten on UX design and ten on UX research (inter-coder reliability: Krippendorff’s $\alpha = .70 - 1$).
- ❖ Coding categories: design skill, research skill, major, degree, company’s recognition, number of views, posting time, location, industry.



RESULTS

Visual Interface Design ($M=1.77$, $SD=.1.16$)	
Illustrator Skill	54% (No. 1)
Photoshop/Light Room Skill	53% (No. 2)
InDesign Skill	35% (No. 5)
Adobe Animate/After Effect	35% (No. 5)
Prototyping ($M=1.52$, $SD=.1.54$)	
Sketch	46% (No. 3)
Adobe XD	37% (No. 4)
InVision	29%
Axure	21%
Balsamiq	11%
Omnigraffle/JustinMind/Mockplus	8%
Coding ($M=.92$, $SD=.1.29$)	
Dreamweaver/HTML	37% (No. 4)
CSS	33%
JavaScript/JQuery	20%
Back-end language	2%
Usability Testing ($M=.02$, $SD=.1.14$)	
Usability Testing Skill	2%
UserTesting.com	1%
UserZoom	1%

Note. $N = 100$

No Degree	82%
Bachelor's	18%
Master's	0%
PhD	0%

Note. $N = 100$

Human Computer Interaction	61%	No. 1
Psychology	46%	No. 2
Human Factor	35%	No. 3
Graphic Design	19%	No. 4
Information Technology	16%	No. 5
Anthropology	12%	
Computer Science	8%	
Industrial Design	4%	
User Experience	3%	

Note. $N = 100$

Behavioral Qualitative (<i>M</i> = .89, <i>SD</i> = .84)		
Usability lab studies	55%	No. 1
Ethnographic field studies	34%	No. 5
Behavioral Mixed (<i>M</i> = .97, <i>SD</i> = .10)		
Moderated Remote Usability Studies	47%	No. 2
Usability Benchmarking	38%	No. 3
Unmoderated Remote Panel Studies	10%	
Eye-tracking	2%	
Behavioral Quantitative (<i>M</i> = .21, <i>SD</i> = .53)		
A/B testing	14%	
Unmoderated UX studies	4%	
Clickstream analysis	3%	
True intent studies	0%	
Attitudinal Qualitative (<i>M</i> = .57, <i>SD</i> = .83)		
Interviews	37%	No. 4
Focus groups	16%	
Participatory design	4%	
Attitudinal Mixed (<i>M</i> = .36, <i>SD</i> = .56)		
Card Sorting	17%	
Concept testing	10%	
Diary/Camera studies	5%	
Customer Feedback	0%	
Desirability studies	0%	
Attitudinal Quantitative (<i>M</i> = .67, <i>SD</i> = .93)		
Email surveys	34%	No. 5
Intercept surveys	33%	

Note. $N = 100$

No Degree	49%	No. 1
Bachelor Degree	27%	No. 2
Master Degree	17%	No. 3
Ph.D. Degree	1%	No. 5
Degree with no specification on levels	6%	No. 4

Note. $N = 100$

Human Computer Interaction/User Interaction Design	39% (No. 1)
Design/Graphic Design/Computer Graphic Design	32% (No. 2)
Computer Science	12% (No. 3)
Human Factor	10% (No. 4)
Industrial Design	6% (No. 5)
Information technology/science/system/design/architecture	6% (No. 5)
Psychology	4%
User Experience	2%

Note. $N = 100$

Information Technology & Services & Computer & Network Security	59%	No. 1
Computer Software	37%	No. 2
Internet (including e-commerce)	21%	No. 3
Finance, Financial Services, Banking	15%	No. 4
Marketing /Advertising Services	13%	No. 5
Health/Wellness & Fitness/Cosmetics	9%	
Electrical/Electronic Manufacturing /Machinery/ Industrial Automation	8%	
Staffing and Recruiting	4%	
Consumer Goods	2%	
Higher Education	1%	

Note. $N = 100$

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Health/Wellness & Fitness/Cosmetics	8%	
Staffing and Recruiting	7%	
Consumer Goods	3%	
Higher Education	2%	
Electrical/Electronic Manufacturing /Machinery/ Industrial Automation	1%	

Note. $N = 100$

	West	Mid-west	South	Northeast	$\chi^2 (3, N=200)$
UX Designers	12.5% ^a	9.0% ^a	15.5% ^a	13.0% ^a	$\chi^2 (3, N=200) = 10.71$
UX Researchers	21.5% ^b	11.0% ^a	8.5% ^b	9.0% ^a	$p < .05$

Note. $N = 200$

	No Degree	Bachelor	Master/PhD	Degree required but not clarified	$\chi^2 (4, N=200)$
UX Designers	41.0% ^a	9.0% ^a	0 ^a	0 ^a	$\chi^2 (4, N=200) = 34.11$
UX Researchers	24.5% ^b	13.5% ^a	9.0% ^b	3.0% ^b	$p < .001$

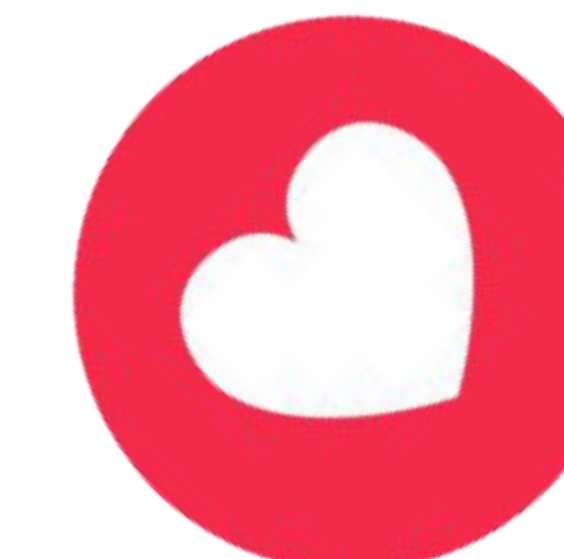
Note. $N = 200$

	Human Computer Interaction		$\chi^2 (1, N=200) = 15.73, p < .001$
UX Designers	Yes	No	
UX Researchers	11.5% ^a	38.5% ^b	
	25.0% ^b	25.0% ^b	
	Human Factor		$\chi^2 (1, N=200) = 15.67, p < .001$
UX Designers	Yes	No	
UX Researchers	5.0% ^a	45.0% ^b	
	16.5% ^b	33.5% ^b	
	Design		$\chi^2 (1, N=200) = 3.88, p < .05$
UX Designers	Yes	No	
UX Researchers	8.0% ^a	42.2% ^b	
	3.5% ^b	46.2% ^b	
	Psychology		$\chi^2 (1, N=200) = 47.04, p < .001$
UX Designers	Yes	No	
UX Researchers	2.0% ^a	48.0% ^b	
	23.0% ^b	27.0% ^b	
	Information Tech/Science System/Architecture		$\chi^2 (1, N=200) = 5.11, p < .05$
UX Designers	Yes	No	
UX Researchers	3.0% ^a	47.0% ^b	
	8.0% ^b	42.0% ^b	
	Anthropology		$\chi^2 (1, N=200) = 12.77, p < .001$
UX Designers	Yes	No	
UX Researchers	0 ^a	50.0% ^b	
	6.0% ^b	44.0% ^b	

Note. $N=200$. ^a $p < .05$.

	B	SE	β
Companies' Recognition	4.83	23.49	.02
Posting Time	312	.135	.16 ^a
Midwest	12.987	26.571	-.04
South	-50.847	25.284	-.16 ^a
Northeast	27.468	25.763	.08
Adjusted R^2	.063		
F	2.596		

Note. $N=200$. The same columns with different superscripts ^a and ^b mean they are significantly different at .05.



DISCUSSION

- ❖ For UX designer job ads, visual interface design is the most desired design skill, followed by prototyping, coding, and usability testing.
- ❖ For UX researcher job ads, the behavioral mixed method and the behavioral qualitative method are two of the most desired research skills.
- ❖ Information Technology & Service (59%), and Computer & Network Security (63%) are the two industries that have the highest need in UX designers and UX researchers.
- ❖ The South (15.5%) has the highest need for UX designers whereas the West (21.5%) has the highest need for UX researchers.
- ❖ Job posting time and the geographic location of the Northeast are two significant predictors of the number of views on a job ad.



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