

# User Experience/Interaction Design

### March 2018

Prepared by the Los Angeles/Orange County Center of Excellence for Labor Market Research

## **Program Recommendation**

This report was compiled by the Los Angeles/Orange County Center of Excellence to provide regional labor market data for the program recommendation of user experience/interaction design. This report can help determine whether there is demand in the local labor market that is not being met by the supply from programs of study (CCC and non-CCC) that align with this occupation group.

Based on the data, the COE has determined **an unmet need** for a user experience/interaction design program in Los Angeles County. Reasons include:

- Jobs related to user experience/interaction design are predicted to experience a 5% increase through 2022
- Nearly one third of the industry workers have completed some community college education as their highest level of education, making these occupations relevant to community college students
- There are expected to be over 2,800 annual openings for user experience/interaction design related jobs

## **Occupation Codes and Descriptions**

Currently, there are three occupations in the standard occupational classification (SOC) system related to the study of user experience/interaction design. The occupation titles and descriptions, as well as reported job titles are included in Exhibit 1.

Exhibit 1 - Occupations, descriptions, and sample job titles

SOC Code	Title	Description	Sample of Reported Job Titles
15-1134	Web Developers	Design, create, and modify Web sites. Analyze user needs to implement Web site content, graphics, performance, and capacity. May integrate Web sites with other computer applications. May convert written, graphic, audio, and video components to compatible Web formats by using software designed to facilitate the creation of Web and multimedia content.	Designer, Technology Applications Engineer, Web Architect, Web Design Specialist, Web Designer, Web Developer, Web Development Director, Web Development Instructor, Webmaster

27-1014	Multimedia Artists and Animators	Create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials.	3D Animator, 3D Artist, Animation Director, Animator, Art Director, Artist, Creative Director, Graphic Artist, Graphic Designer, Illustrator
27-1024	Graphic Designers	Design or create graphics to meet specific commercial or promotional needs, such as packaging, displays, or logos. May use a variety of mediums to achieve artistic or decorative effects.	Artist, Creative Director, Creative Manager, Design Director, Designer, Graphic Artist, Graphic Designer, Online Producer, Production Artist, Publications Designer

Source: O\*NET Online

# **Current and Future Employment**

In Los Angeles County, the number of user experience/interaction design related jobs are expected to increase by 5% over the next five years. Over 2,800 job opportunities will be available annually for this occupation group through 2022 due to new job growth and replacement need (e.g., retirements). Exhibit 2 contains detailed employment projections data for the occupations.

Exhibit 2 - Five-year projections for user experience/interaction design occupations

soc	Occupation	201 <i>7</i> Jobs	2022 Jobs	2017 - 2022 Change	2017 - 2022 % Change	Annual Openings
27-1024	Graphic Designers	15,939	16,031	92	1%	1,490
15-1134	Web Developers	<i>7,</i> 751	8,546	795	10%	719
27-1014	Multimedia Artists and Animators	6,907	7,452	545	8%	668
	Total	30,597	32,029	1,432	5%	2,877

Source: Economic Modeling Specialists International (EMSI)

# **Earnings**

In Los Angeles County, the entry-level average wage for user experience/interaction design related jobs is between \$12.11 and \$17.70 per hour. The entry-level average wage for multimedia artists and animators is below the MIT Living Wage<sup>1</sup> estimate of \$13.54 per hour for a single adult in Los Angeles County. The average annual earnings for these occupations in the region are between \$52,877 and \$69,432 per year, assuming full-time employment.

<sup>&</sup>lt;sup>1</sup> MIT Living Wage Calculator. http://livingwage.mit.edu/

Exhibit 3 contains hourly wages and annual average earnings for this occupation group. Entry-level hourly earnings is represented by the 10<sup>th</sup> percentile of wages, median hourly earnings is represented by the 50<sup>th</sup> percentile of wages, and experienced hourly earnings is represented by the 90<sup>th</sup> percentile of wages, demonstrating various levels of employment.

Exhibit 3 - Earnings for user experience/interaction design occupations

soc	Occupation	Entry-Level Hourly Earnings	Median Hourly Earnings	Experienced Hourly Earnings	Average Annual Earnings
15-1134	Web Developers	\$17.70	\$27.09	\$58.27	\$68,694
27-1024	Graphic Designers	\$14.76	\$21.16	\$41.66	\$52,877
27-1014	Multimedia Artists and Animators	\$12.11	\$31.43	\$57.26	\$69,432

Source: Economic Modeling Specialists International (EMSI)

### **Employer Job Postings**

In this research brief, real-time labor market information is used to provide a more nuanced view of the current job market, as it captures job advertisements for occupations relevant to the field of study. Employer job postings are consulted to understand who is employing in the field of user experience/interaction design, and what they are looking for in potential candidates. To identify job postings the SOC codes 15-1134, 27-1014 and 27-1024 were used. In 2017, there were 7,808 employer postings for jobs related to user experience/interaction design. There were 13,468 job postings for the same occupations in 2016, and 20,808 job postings in 2015.

### Top Titles

The top job titles for employers posting ads for user experience/interaction design positions are listed in Exhibit 4. Graphic designer is mentioned as the job title in 15% of all relevant job postings (1,153 out of 7,808 postings).

Exhibit 4 – Job titles (n=7,808)

Title	Job Postings, Full Year 2017
Graphic Designer	1,153
Web Developer	840
Front End Developer	626
User Experience (UX) Designer	352
PHP Developer	349
User Interface (UX)/User Experience (UX) Designer	222
Senior Javascript Engineer	195
Senior Frontend Engineer	183
Web Designer	166

Source: Labor Insight/Jobs (Burning Glass)

# Top Employers

Exhibit 5 lists the major employers hiring in the field of user experience/interaction design. Top employers posting job ads included Petco, Hired and Disney. The top worksite cities in the region for these job postings were Los Angeles, Santa Monica and Pasadena.

Exhibit 5 - Top employers (n=3,224)

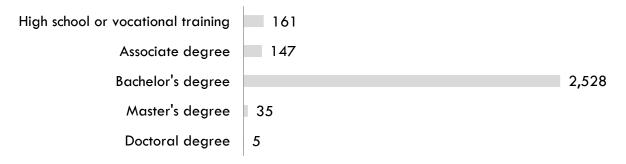
Employer	Job Postings, Full Year 2017
Petco	105
Hired	88
Disney	52
Activision	45
NBC	44
SMCI	43
Anthem Blue Cross	37
KRG Technologies	31
Schlumberger	30

Source: Labor Insight/Jobs (Burning Glass)

#### Advertised Education Levels

Exhibit 6 displays the education level requested by employers in online job ads. The majority of employers were looking for a candidate with a Bachelor's degree. Approximately 63% of job postings did not specify a level of education.

Exhibit 6 – Online job ads with minimum advertised education requirements for user experience/interaction design jobs (n=2,876)



Source: Labor Insight/Jobs (Burning Glass)

### **Education and Training**

Exhibit 7 shows the typical entry-level education requirement for the occupations of interest, along with the typical on-the-job training, and percentage of workers in the field who hold a community college award or have completed some postsecondary courses. Between 27% and 30% of the workforce has completed some community college education as their highest level of education.

Exhibit 7 - Education and training requirements

soc	Description	Typical entry- level education	Typical on-the- job training	% of Community College Award Holders or Some Postsecondary Coursework
27-1024	Graphic Designers	Bachelor's degree	None	30%
15-1134	Web Developers	Associate's degree	None	27%
27-1014	Multimedia Artists and Animators	Bachelor's degree	Moderate-term on-the-job training	27%

Source: Economic Modeling Specialists International, Bureau of Labor Statistics Employment Projections (Educational Attainment)

### **Student Outcomes**

The CTE LaunchBoard provides student outcome data on the effectiveness of CTE programs. The following student outcome information was collected from exiters of the Digital Media Taxonomy of Program (TOP) code (0614.00) in Los Angeles County for the 2015-16 academic year.

- 30% of students are earning a living wage
- 59% of students are employed within six months after completing a program

Source: CTE LaunchBoard

### Sources

O\*Net Online, Labor Insight/Jobs (Burning Glass), Economic Modeling Specialists International (EMSI), MIT Living Wage Calculator, Bureau of Labor Statistics (BLS) Education Attainment, California Community Colleges Chancellor's Office Management Information Systems (MIS) Data Mart, CTE LaunchBoard, Statewide CTE Outcomes Survey, Employment Development Department Unemployment Insurance Dataset

#### **Notes**

Data included in this analysis represents the labor market demand for positions most closely related to user experience/interaction design. Standard occupational classification (SOC) codes were chosen based on the national education level required for employment (associate degree and postsecondary certificate) as well as the proportion of current workers who hold a community college award or have had some community college training. This selection process narrows the labor market analysis to the most relevant employment opportunities for students with community college education and/or training.

Traditional labor market information was used to show current and projected employment based on data trends, as well as annual average awards granted by regional community colleges. Real-time labor market information captures job post advertisements for occupations relevant to the field of study and should not be used to establish current job openings, because the numbers may include duplicate job postings or postings intended to gather a pool of applicants. Real-time labor market information can signal demand and show what employers are looking for in potential employees, but is not a perfect measure of the quantity of open positions.