

Program Overview

6 Programs

Lightcast Q3 2023 Data Set

August 2023

San Mateo County Community College District



Parameters

Completions Year: 2020

Jobs Timeframe: 2022 - 2029

Job Postings Timeframe: Jun 2021 - Jul 2023

Programs:

Code	Description
11.0101	Computer and Information Sciences, General
11.0701	Computer Science
30.3001	Computational Science

Code	Description
30.7001	Data Science, General
30.7101	Data Analytics, General
30.7103	Data Visualization

Regions:

Code	Description
6001	Alameda County, CA
6013	Contra Costa County, CA
6075	San Francisco County, CA

Code	Description
6081	San Mateo County, CA
6085	Santa Clara County, CA

Education Level:

Description
Associate degree

Tuition Type: Tuition & Fees

Graduate Status: Undergraduate

Residency: In-State

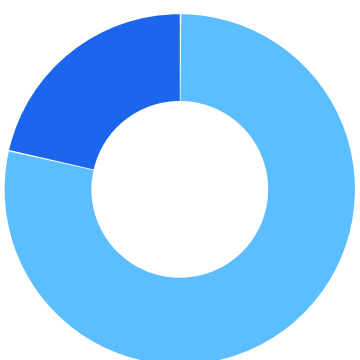
<p>12</p> <p>Institutions</p> <p>20% Growth (2016-2020)</p>	<p>288</p> <p>Completions</p> <p>194% Growth (2016-2020)</p>	<p>Completions Distribution</p> <p>Average: 24</p> <p>Median: 13.5</p>
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Program Overview



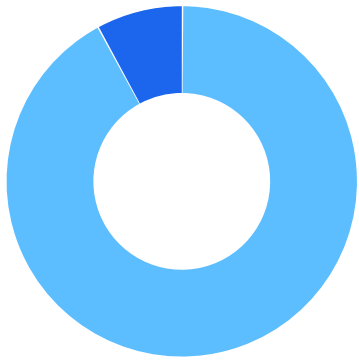
	Completions (2020)	% Completions	Institutions (2020)	% Institutions
● All Programs	288	100%	12	100%
● Distance Offered Programs	10	3%	1	8%
● Non-Distance Offered Programs	278	97%	11	92%

Market Share by Institution Type



Institution Type	Completions (2020)	Market Share
● Public, 2-year	226	78.5%
● Public, 4-year or above	62	21.5%

Market Share by Program

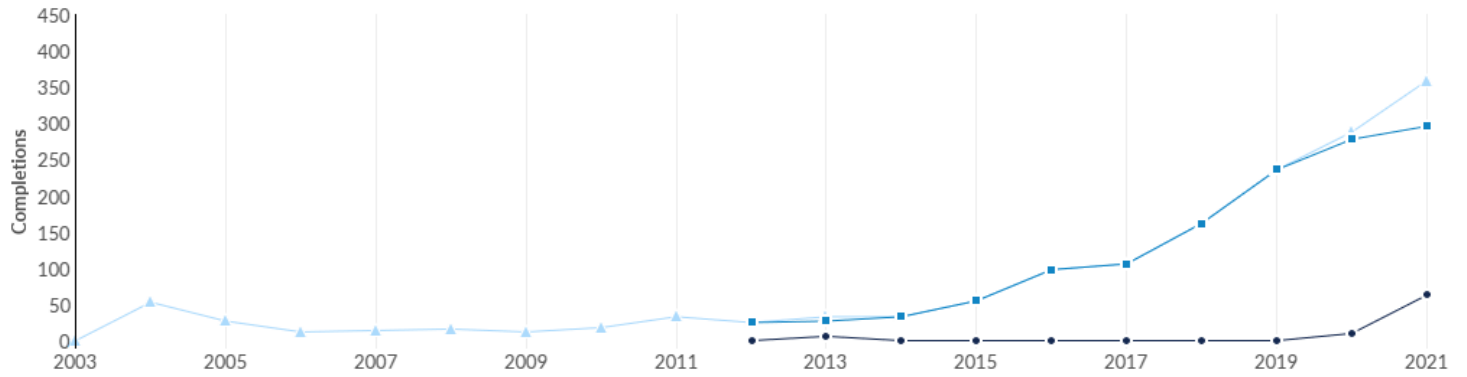


Program	Completions (2020)	Market Share
Computer Science (11.0701)	265	92.0%
Computer and Information Sciences, General (11.0101)	23	8.0%

Completions by Institution

Institution	Associate's Degree Completions (2020)	Growth % YOY (2020)	Market Share (2020)	IPEDS Tuition & Fees (2020)	Completions Trend (2016-2020)
De Anza College	86	45.8%	29.9%	\$1,561	
Foothill College	62	19.2%	21.5%	\$1,563	
City College of San Francisco	47	-9.6%	16.3%	\$1,165	
Chabot College	24	60.0%	8.3%	\$1,150	
Ohlone College	19	18.8%	6.6%	\$1,196	
College of San Mateo	17	-5.6%	5.9%	\$1,434	
Diablo Valley College	10	900.0%	3.5%	\$1,312	
Los Medanos College	6	50.0%	2.1%	\$1,312	
Las Positas College	6	100.0%	2.1%	\$1,168	
Canada College	5	-44.4%	1.7%	\$1,362	

Regional Trends



	2012 Completions	2020 Completions	% Change
● Distance Offered Programs	0	10	+Insf. Data
■ Non-Distance Offered Programs	25	278	+1,012.0%
▲ All Programs	25	288	+1,052.0%

Regional Completions by Award Level



Award Level	Completions (2020)	Percent
● Associate's Degree	288	100.0%

Similar Programs

77
Programs (2020)

9,252
Completions (2020)

CIP Code	Program	Associate's Degree Completions (2020)
24.0101	Liberal Arts and Sciences/Liberal Studies	2,419
52.0201	Business Administration and Management, General	2,329
30.0101	Biological and Physical Sciences	1,682
27.0101	Mathematics, General	689
26.0101	Biology/Biological Sciences, General	684
52.0101	Business/Commerce, General	236
11.0201	Computer Programming/Programmer, General	177
40.0801	Physics, General	160
52.9999	Business, Management, Marketing, and Related Support Services, Other	143
14.0102	Pre-Engineering	91

Target Occupations

*Filtered by the proportion of the national workforce in these occupations with an Associate's degree

<p>32,504</p> <p>Jobs (2022)*</p> <p>130% <i>above</i> National average*</p>	<p>+15.7%</p> <p>% Change (2022-2029)*</p> <p>Nation: +13.1%*</p>	<p>\$75.43/hr</p> <p>\$156.9K/yr</p> <p>Median Earnings</p> <p>Nation: \$46.72/hr;</p> <p>\$97.2K/yr</p>	<p>3,278</p> <p>Annual Openings*</p>
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Occupation	2022 Jobs*	Annual Openings*	Median Earnings	Growth (2022 - 2029)*	Employment Concentration (2022)*
Software Developers	6,035	644	\$87.93/hr	+23.21%	4.30
Computer Occupations, All Other	4,630	403	\$70.41/hr	+8.88%	3.20
Computer and Information Systems Managers	3,500	347	\$104.74/hr	+14.60%	3.74
Computer User Support Specialists	3,107	345	\$37.30/hr	+18.60%	1.23
Computer Systems Analysts	1,790	172	\$68.33/hr	+14.69%	1.92
Management Analysts	1,759	191	\$53.37/hr	+9.27%	1.61
Network and Computer Systems Administrators	1,733	157	\$62.39/hr	+13.04%	1.41
Software Quality Assurance Analysts and Testers	1,339	140	\$68.60/hr	+18.82%	4.01
Computer Network Architects	1,335	110	\$81.86/hr	+11.46%	2.10
Computer Hardware Engineers	1,248	95	\$80.53/hr	+7.37%	8.23
Web and Digital Interface Designers	1,000	117	\$64.62/hr	+18.60%	4.17
Postsecondary Teachers	879	92	\$51.47/hr	+9.22%	1.27
Information Security Analysts	792	102	\$72.17/hr	+32.32%	2.04
Computer Network Support Specialists	700	80	\$42.93/hr	+20.57%	1.16
Computer Programmers	653	48	\$63.77/hr	+0.61%	2.45
Data Scientists	508	61	\$72.49/hr	+27.36%	3.71
Web Developers	385	45	\$53.07/hr	+24.16%	1.64
Data Entry Keyers	363	49	\$21.85/hr	+1.65%	0.70

Natural Sciences Managers	247	26	\$103.57/hr	+14.57%	3.32
Database Administrators	189	19	\$61.74/hr	+17.99%	1.43
Database Architects	164	17	\$82.76/hr	+20.12%	1.61
Computer and Information Research Scientists	93	10	\$108.28/hr	+23.66%	5.14
Statisticians	51	6	\$76.06/hr	+31.37%	1.81
Mathematical Science Occupations, All Other	<10	<i>Insf. Data</i>	\$50.82/hr	<i>+Insf. Data</i>	<i>Insf. Data</i>











Job Postings Summary

<p>16,315</p> <p>Unique Postings</p> <p>52,630 Total Postings</p>	<p>3 : 1</p> <p>Posting Intensity</p> <p>Regional Average: 4 : 1</p>	<p>2,333</p> <p>Employers Competing</p> <p>86,762 Total Employers</p>	<p>27 days</p> <p>Median Posting Duration</p> <p>Regional Average: 30 days</p>
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There were 52,630 total job postings for your selection from June 2021 to July 2023, of which 16,315 were unique. These numbers give us a Posting Intensity of 3-to-1, meaning that for every 3 postings there is 1 unique job posting.

This is close to the Posting Intensity for all other occupations and companies in the region (4-to-1), indicating that they are putting average effort toward hiring for this position.

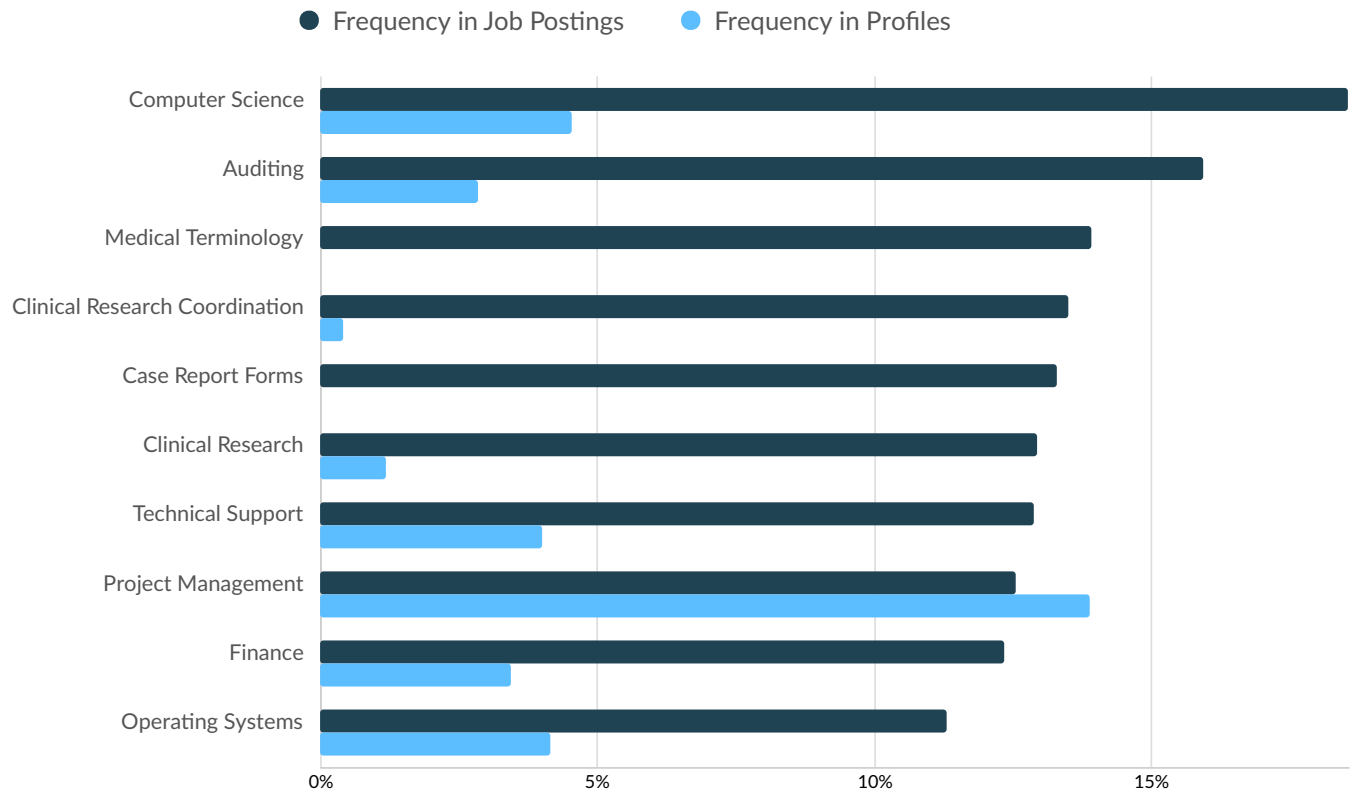
Top Companies Posting

Company	Total/Unique (Jun 2021 - Jul 2023)	Posting Intensity	Median Posting Duration
Stanford University	9,651 / 2,313	4 : 1 	26 days
Revature	6,833 / 1,339	5 : 1 	26 days
Accenture	2,340 / 1,185	2 : 1 	30 days
San Mateo County Community College District	461 / 309	1 : 1 	31 days
Walmart	992 / 274	4 : 1 	23 days
Randstad	565 / 264	2 : 1 	25 days
Contra Costa Community College	599 / 262	2 : 1 	41 days
National Security Agency	403 / 236	2 : 1 	9 days
West Valley-Mission Community College District	334 / 227	1 : 1 	36 days
City & County of San Francisco	715 / 161	4 : 1 	33 days

Top Posted Job Titles

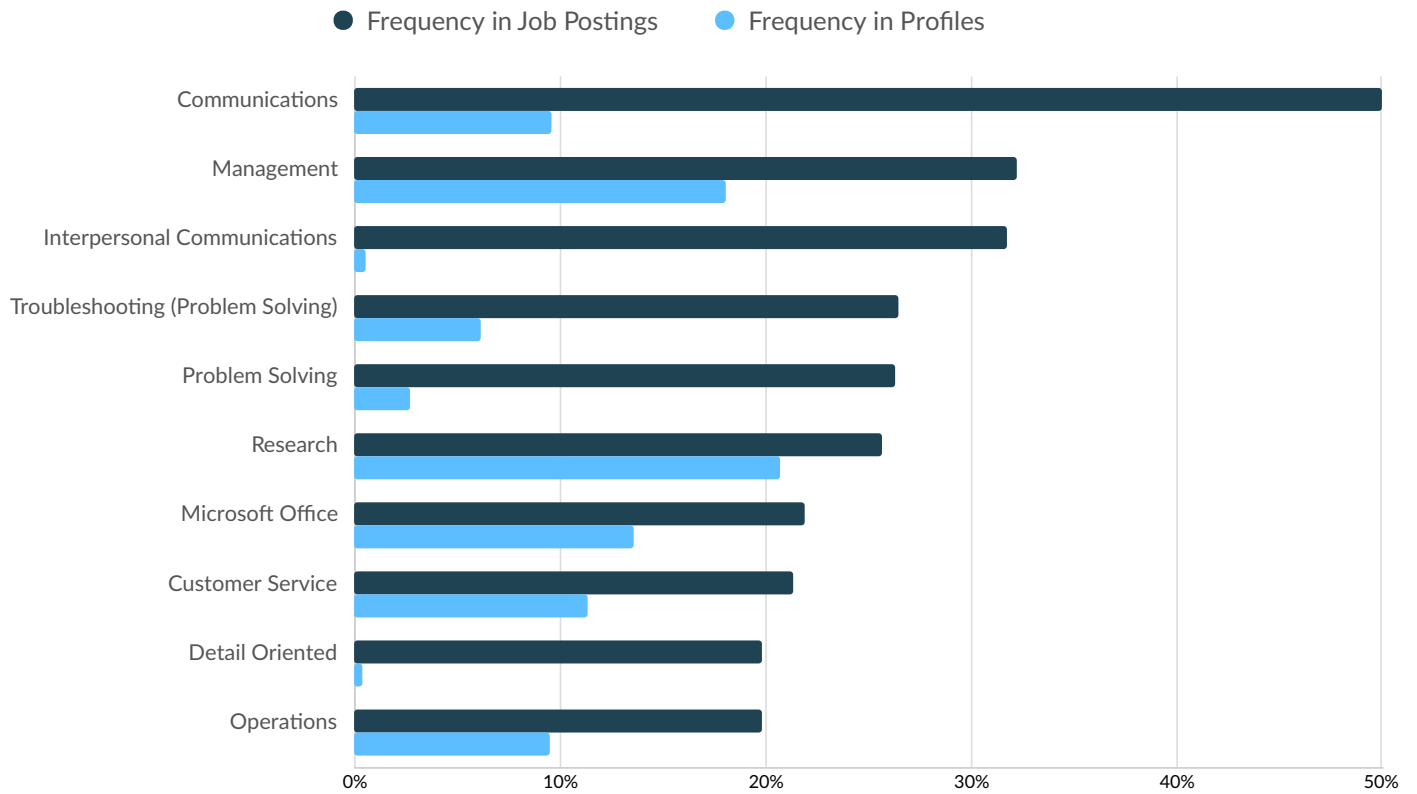
Job Title	Total/Unique (Jun 2021 - Jul 2023)	Posting Intensity	Median Posting Duration
Clinical Research Coordinators	7,577 / 1,575	5 : 1 	25 days
Oncology Clinical Research Coordinators	795 / 293	3 : 1 	27 days
Software Developers	781 / 277	3 : 1 	25 days
Software Engineers	1,265 / 252	5 : 1 	27 days
Java Developers	724 / 197	4 : 1 	25 days
Desktop Support Technicians	527 / 181	3 : 1 	28 days
IT Support Specialists	530 / 174	3 : 1 	34 days
Systems Administrators	421 / 134	3 : 1 	27 days
Front End Developers	607 / 132	5 : 1 	26 days
Computer Programmers	1,969 / 128	15 : 1 	26 days

Top Specialized Skills



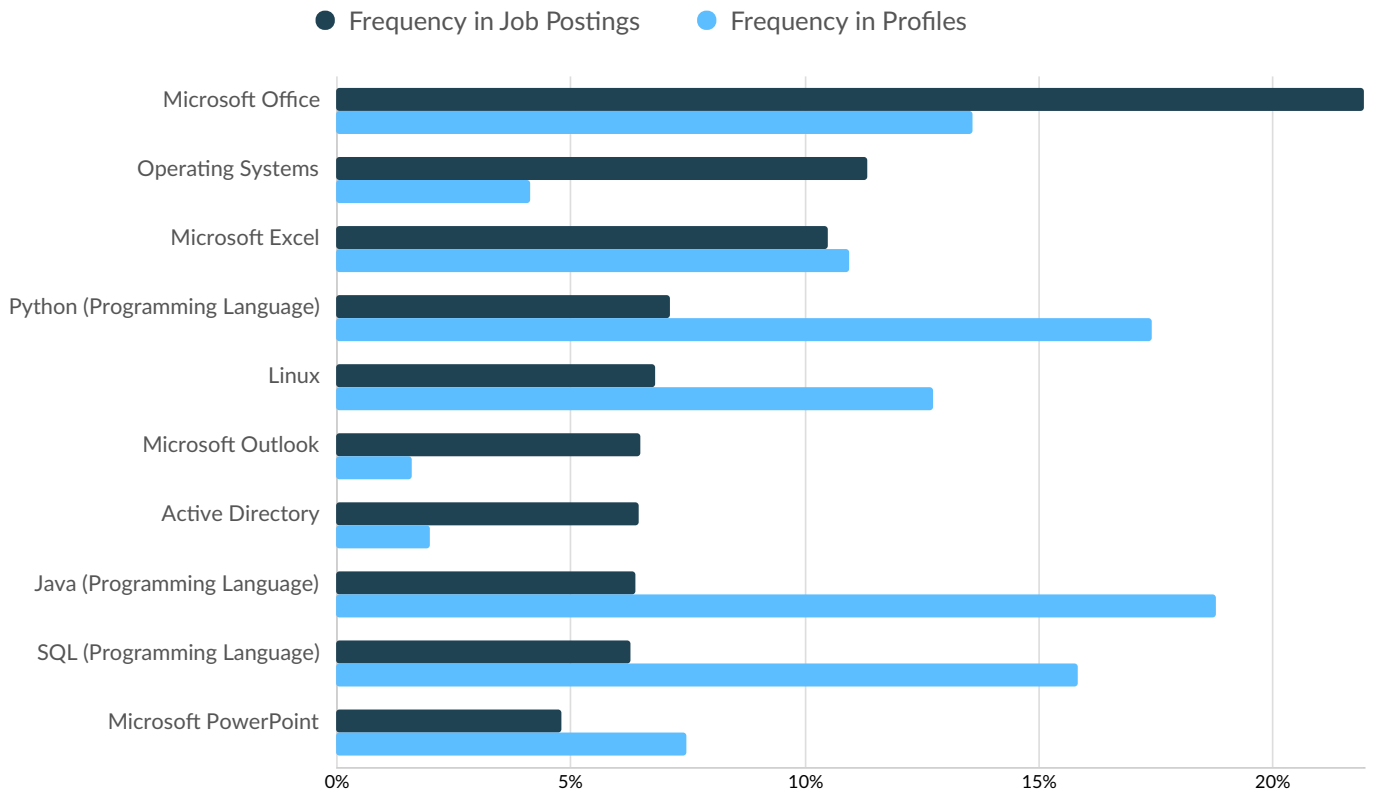
Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Computer Science	3,029	19%	29,315	5%
Auditing	2,602	16%	18,424	3%
Medical Terminology	2,273	14%	0	0%
Clinical Research Coordination	2,205	14%	2,640	0%
Case Report Forms	2,169	13%	0	0%
Clinical Research	2,111	13%	7,625	1%
Technical Support	2,105	13%	25,954	4%
Project Management	2,049	13%	89,693	14%
Finance	2,014	12%	22,211	3%
Operating Systems	1,848	11%	26,778	4%

Top Common Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Communications	8,165	50%	61,897	10%
Management	5,267	32%	117,036	18%
Interpersonal Communications	5,183	32%	3,861	1%
Troubleshooting (Problem Solving)	4,330	27%	39,889	6%
Problem Solving	4,294	26%	17,826	3%
Research	4,191	26%	133,626	21%
Microsoft Office	3,581	22%	87,825	14%
Customer Service	3,487	21%	73,600	11%
Detail Oriented	3,237	20%	2,754	0%
Operations	3,236	20%	61,556	10%

Top Software Skills



Skills	Postings	% of Total Postings	Profiles	% of Total Profiles
Microsoft Office	3,581	22%	87,825	14%
Operating Systems	1,848	11%	26,778	4%
Microsoft Excel	1,712	10%	70,625	11%
Python (Programming Language)	1,164	7%	112,469	17%
Linux	1,109	7%	82,323	13%
Microsoft Outlook	1,058	6%	10,524	2%
Active Directory	1,054	6%	12,971	2%
Java (Programming Language)	1,042	6%	121,228	19%
SQL (Programming Language)	1,024	6%	102,351	16%
Microsoft PowerPoint	784	5%	48,316	7%

Top Qualifications

Qualification	Postings with Qualification
Valid Driver's License	1,072
CompTIA A+	678
CompTIA Network+	402
Microsoft Certified Professional	380
Registered Nurse (RN)	350
Security Clearance	348
Cisco Certified Network Associate	331
Microsoft Certified Systems Engineer	277
Project Management Professional Certification	179
CompTIA Security+	164

Appendix A

Program Selection Details

CIP Code	Program Name
11.0101	Computer and Information Sciences, General
11.0701	Computer Science
30.3001	Computational Science
30.7001	Data Science, General
30.7101	Data Analytics, General
30.7103	Data Visualization

Appendix B - Data Sources and Calculations

Institution Data

The institution data in this report is taken directly from the national IPEDS database published by the U.S. Department of Education's National Center for Education Statistics.

Location Quotient

Location quotient (LQ) is a way of quantifying how concentrated a particular industry, cluster, occupation, or demographic group is in a region as compared to the nation. It can reveal what makes a particular region unique in comparison to the national average.

Occupation Data

Emsi occupation employment data are based on final Emsi industry data and final Emsi staffing patterns. Wage estimates are based on Occupational Employment Statistics (QCEW and Non-QCEW Employees classes of worker) and the American Community Survey (Self-Employed and Extended Proprietors). Occupational wage estimates are also affected by county-level Emsi earnings by industry.

Lightcast Job Postings

Job postings are collected from various sources and processed/enriched to provide information such as standardized company name, occupation, skills, and geography.

State Data Sources

This report uses state data from the following agencies: California Employment Development Department