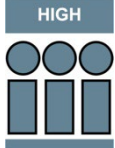


Artificial Intelligence Occupations

Labor Market Analysis: San Diego County

September 2026

Summary

NEW PROGRAM RECOMMENDATION?	EVIDENCE OF A SUPPLY GAP?	AT OR ABOVE THE LIVING WAGE?	EXPECTED LEVEL(S) OF EDUCATION
 Do Not Proceed	 	 	☐ Doctorate Degree ☒ Master's Degree ☒ Bachelor's Degree ☐ Associate degree ☐ Some College or Certificate ☐ HS Diploma or Equivalent ☐ Less Than a HS Diploma ☐ Apprenticeship
SUPPORT FOR PROGRAM MODIFICATION?	NUMBER OF INSTITUTIONS THAT PROVIDE TRAINING	NUMBER OF ANNUAL JOB OPENINGS	
 	HIGH 	HIGH 	

The San Diego & Imperial Center of Excellence (COE) developed this brief to assist the region's community colleges with strategic planning and program development. *Artificial Intelligence Occupations* include "Computer and Information Research Scientists," "Computer Occupations, All Other," "Data Scientists," and "Software Developers." According to available data, *Artificial Intelligence Occupations* in San Diego County have a labor market demand of 2,318 annual job openings (while average demand for a single occupation in San Diego County is 289 annual job openings), and 17 institutions supply a conservative estimate of 2,386 annual awards under the selected programs. This brief recommends that the colleges do not proceed with developing a new program for these occupations because the conservative estimate suggests an oversupply in the region and the expected education is a bachelor's degree or master's degree. However, entry-level wages are above the living wage. The COE supports a program modification because AI-focused postings increased from 102 in 2023 to 421 in 2025, indicating an opportunity to add current AI content to established programs.

Introduction

This report provides labor market information in San Diego County for the following occupational codes in the Standard Occupational Classification (SOC)¹ system:

- **Computer and Information Research Scientists** (SOC 15-1221): Design innovative uses for new and existing computing technology and study and solve complex problems in computing for business, science, medicine, and other fields.
- **Computer Occupations, All Other** (SOC 15-1299): Perform computer-related work not separately classified in another detailed computer occupation.
- **Data Scientists** (SOC 15-2051): Develop and implement analytical techniques that transform raw data into meaningful information using data-oriented programming languages and visualization software.
- **Software Developers** (SOC 15-1252): Research, design, and develop computer and network software or specialized utility programs; analyze user needs and develop software solutions.

For the purpose of this report, these occupations are referred to as *Artificial Intelligence Occupations*.

¹ The Standard Occupational Classification (SOC) system is used by federal statistical agencies to classify workers into occupational categories for collecting, calculating, and disseminating data. [bls.gov/soc](https://www.bls.gov/soc)

Projected Occupational Demand

Between 2025 and 2030, businesses in San Diego County will need to hire **2,318** employees annually to fill new jobs and backfill positions made vacant through turnover and retirement (Exhibit 1). Software Developers have the greatest share of demand, with **1,413** annual openings. Overall employment is projected to increase by **1,735** jobs, or **five percent**, during the five-year period.

Exhibit 1: Number of Jobs for Artificial Intelligence Occupations (2025-2030)²

Occupational Title	2025 Jobs	2030 Jobs	2025-2030 Net Jobs Change	2025-2030 % Net Jobs Change	Annual Job Openings (Demand)
Software Developers	21,338	22,618	1,280	6%	1,413
Computer Occupations, All Other	9,428	9,708	280	3%	646
Data Scientists	2,465	2,590	125	5%	173
Computer and Information Research Scientists	1,200	1,250	50	4%	86
Total	34,431	36,166	1,735	5%	2,318

Earnings

According to traditional³ labor market information (LMI), entry-level hourly earnings for *Artificial Intelligence Occupations* range from **\$40.07** to **\$61.82** (Exhibit 2).

Exhibit 2: Hourly Earnings for Artificial Intelligence Occupations in San Diego County⁴

Occupational Title	Entry-Level Hourly Earnings (25th Percentile)	Median Hourly Earnings	Experienced Hourly Earnings (75th Percentile)
Software Developers	\$61.82	\$78.49	\$93.26
Computer and Information Research Scientists	\$46.24	\$58.43	\$75.23
Data Scientists	\$44.91	\$62.98	\$78.93
Computer Occupations, All Other	\$40.07	\$61.34	\$75.23

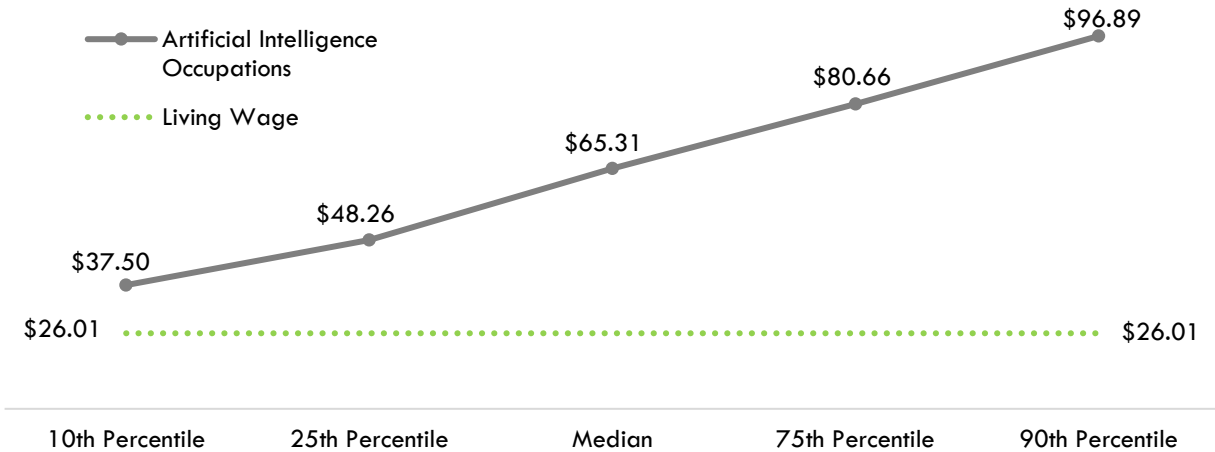
² Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

³ Traditional LMI is generally historical data captured by the U.S. Bureau of Labor Statistics (BLS) or the California Employment Development Department (EDD). It does not account for recent technological, economic, or legislative changes that may affect labor market demand and wages.

⁴ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

On average, the entry-level hourly earnings for employed *Artificial Intelligence Occupations* are **\$48.26**—or **\$100,380.80** in annual salary⁵; this is more than the living wage for a single adult in San Diego County, which is **\$26.01** per hour (Exhibit 3).⁶

Exhibit 3: Average Hourly Earnings⁷ for Artificial Intelligence Occupations in San Diego County⁸



⁵ Annualized salaries assume a full-time position with 2,080 work hours. Multiplying the hourly wage by 2,080 yields the annual salary.

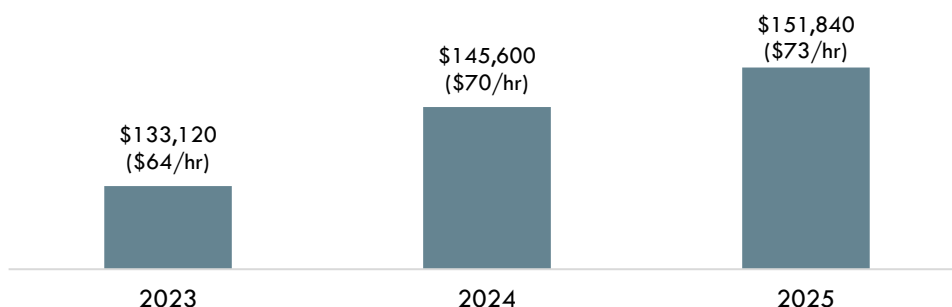
⁶ Center for Women's Welfare, University of Washington. The Self-Sufficiency Standard for California 2024. selfsufficiencystandard.org/california

⁷ The 10th and 25th percentiles may be considered entry-level wages; the 75th and 90th percentiles may be considered experienced wages.

⁸ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

In online job postings, employers advertised 25th-percentile entry-level wages of **\$63.98** per hour in 2023 and **\$72.78** per hour in 2025 for *Artificial Intelligence Occupations* in San Diego County (Exhibit 4).⁹ This suggests that employer-advertised entry-level wages in online job postings were above the entry-level wages reported in traditional labor market information and increased over the period analyzed.

Exhibit 4: Entry-Level Advertised Salaries in Online Job Postings for Artificial Intelligence Occupations in San Diego County (2023-2025)*



*Hourly wages are rounded to the nearest dollar amount.

Expected Level of Education

According to traditional LMI reported to the California Employment Development Department and U.S. Bureau of Labor Statistics, *Artificial Intelligence Occupations* typically require either a **bachelor's degree** or a **master's degree** for entry-level employment (Exhibit 5).¹⁰

Exhibit 5: National Educational Attainment for Artificial Intelligence Occupations¹¹

Occupational Title	Typical Entry-Level Education
Computer and Information Research Scientists	Master's degree
Computer Occupations, All Other	Bachelor's degree
Data Scientists	Bachelor's degree
Software Developers	Bachelor's degree

⁹ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

¹⁰ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

¹¹ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed.

Similarly, a [bachelor's degree](#) was the most requested listed educational requirement in online job postings for *Artificial Intelligence Occupations* in San Diego County between January 1, 2023 and December 31, 2025. Employers also expected the following certifications (Exhibit 6).¹²

**Exhibit 6: Top Certifications for *Artificial Intelligence Occupations*
in San Diego County in Online Job Postings (2023-2025)¹³**

- | | |
|--|---|
| 1. Secret Clearance | 6. Top Secret Clearance |
| 2. Security Clearance | 7. GIAC Certifications |
| 3. Top Secret-Sensitive Compartmented Information (TS/SCI Clearance) | 8. IAT Level II Certification |
| 4. CompTIA Security+ | 9. CompTIA SecurityX |
| 5. Certified Information Systems Security Professional | 10. Project Management Professional Certification |

¹² Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

¹³ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

Educational Supply

Educational supply for an occupation can be estimated by analyzing the number of awards in related Taxonomy of Programs (TOP) or Classification of Instructional Programs (CIP) codes. There are 12 confirmed TOP codes and 22 confirmed CIP codes related at least partially to *Artificial Intelligence Occupations*. For this conservative estimate, an asterisk identifies the five TOP codes and nine CIP codes selected as the programs most closely aligned with the occupations analyzed (Exhibit 7).

Exhibit 7: Related TOP and CIP Codes for *Artificial Intelligence Occupations*¹⁴

TOP or CIP Code	TOP or CIP Program Title
TOP 0701.00	Information Technology, General
TOP 0702.00	Computer Information Systems
TOP 0702.10	Software Applications
TOP 0706.00*	Computer Science (Transfer)
TOP 0707.00*	Computer Software Development
TOP 0707.10*	Computer Programming
TOP 0707.20*	Database Design and Administration
TOP 0707.30*	Computer Systems Analysis
TOP 0708.00	Computer Infrastructure and Support
TOP 0708.10	Computer Networking
TOP 1701.00	Mathematics, General
TOP 1799.00	Other Mathematics
CIP 11.0101	Computer and Information Sciences, General
CIP 11.0102*	Artificial Intelligence
CIP 11.0103	Information Technology
CIP 11.0201*	Computer Programming/Programmer, General
CIP 11.0202	Computer Programming, Specific Applications

¹⁴ This brief uses a conservative estimate of program supply based on the five TOP and nine CIP codes marked with an asterisk in Exhibit 7.

Exhibit 7 (continued): Related TOP and CIP Codes for *Artificial Intelligence Occupations*

TOP or CIP Code	TOP or CIP Program Title
CIP 11.0203	Computer Programming, Vendor/Product Certification
CIP 11.0205	Computer Programming, Specific Platforms
CIP 11.0301	Data Processing and Data Processing Technology/Technician
CIP 11.0501*	Computer Systems Analysis/Analyst
CIP 11.0701*	Computer Science
CIP 11.0802*	Data Modeling/Warehousing and Database Administration
CIP 11.0902	Cloud Computing
CIP 15.1202	Computer/Computer Systems Technology/Technician
CIP 15.1204	Computer Software Technology/Technician
CIP 27.0101	Mathematics, General
CIP 27.0301	Applied Mathematics, General
CIP 27.9999	Mathematics and Statistics, Other
CIP 30.3001*	Computational Science
CIP 30.7001*	Data Science, General
CIP 30.7101*	Data Analytics, General
CIP 30.7102	Business Analytics
CIP 30.7103*	Data Visualization

According to TOP data, nine community colleges supply the region with awards for these occupations: Cuyamaca College, Grossmont College, MiraCosta College, Palomar College, San Diego City College, San Diego College of Continuing Education, San Diego Mesa College, San Diego Miramar College, and Southwestern College. According to CIP data, eight non-community-college institutions supply the region with awards: California State University-San Marcos, National University, Northcentral University, Point Loma Nazarene University, Poway Adult School, San Diego State University, University of California-San Diego, and University of San Diego. Combined, the 17 institutions confer a conservative estimate of 2,386 awards annually based on the TOP and CIP codes marked with an asterisk in Exhibit 7 (Exhibit 8).

Exhibit 8: Number of Awards Conferred by Postsecondary Institutions
(Three-Year Annual Averages)¹⁵¹⁶

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards	Other Institutions 3-Yr Annual Average Awards	Total Average Supply
0706.00	Computer Science (Transfer)	232	0	232
	Cuyamaca	5	0	
	• Associate degree	5	0	
	Grossmont	63	0	
	• Associate degree	63	0	
	MiraCosta	16	0	
	• Associate degree	16	0	
	Palomar	45	0	
	• Associate degree	19	0	
	• Certificate 16 < 30 units	26	0	
	San Diego Mesa	22	0	
	• Associate degree	22	0	
	San Diego Miramar	44	0	
	• Associate degree	44	0	
	Southwestern	37	0	
	• Associate degree	37	0	
0707.00	Computer Software Development	67	0	67
	Grossmont	4	0	
	• Certificate 8 < 16 units	4	0	

¹⁵ California Community Colleges Chancellor's Office Data Mart, program years 2020-21 through 2022-23.

¹⁶ National Center for Education Statistics, Integrated Postsecondary Education Data System completions, academic years 2020-21 through 2022-23.

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards	Other Institutions 3-Yr Annual Average Awards	Total Average Supply
	MiraCosta	24	0	
	• Associate degree	10	0	
	• Certificate 16 < 30 units	13	0	
	• Certificate 6 < 18 units	1	0	
	Palomar	2	0	
	• Associate degree	1	0	
	• Certificate 30 < 60 units	1	0	
	San Diego Cont Ed	37	0	
	• Noncredit 192 < 288 hrs	37	0	
0707.10	Computer Programming	154	0	154
	Grossmont	35	0	
	• Associate degree	16	0	
	• Certificate 30 < 60 units	11	0	
	• Certificate 16 < 30 units	8	0	
	Palomar	4	0	
	• Certificate 8 < 16 units	4	0	
	San Diego City	1	0	
	• Associate degree	1	0	
	San Diego Cont Ed	109	0	
	• Noncredit 288 < 480 hrs	1	0	
	• Noncredit 144 < 192 hrs	19	0	
	• Noncredit 48 < 96 hrs	89	0	
	Southwestern	5	0	
	• Associate degree	3	0	
	• Certificate 6 < 18 units	2	0	
0707.20	Database Design and Administration	0	0	0
0707.30	Computer Systems Analysis	349	0	349
	San Diego Cont Ed	349	0	
	• Noncredit 480 < 960 hrs	9	0	
	• Noncredit 192 < 288 hrs	6	0	
	• Noncredit 96 < 144 hrs	334	0	
11.0102	Artificial Intelligence	0	12	12
	University of San Diego	0	12	
	• Master's degree	0	12	

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards	Other Institutions 3-Yr Annual Average Awards	Total Average Supply
11.0201	Computer Programming/Programmer, General	0	1	1
	Poway Adult School	0	1	
	• Certificates < 1 year	0	1	
11.0501	Computer Systems Analysis/Analyst	0	0	0
11.0701	Computer Science	0	1,528	1,528
	California State University-San Marcos	0	176	
	• Bachelor's degree	0	149	
	• Master's degree	0	27	
	National University	0	60	
	• Bachelor's degree	0	35	
	• Master's degree	0	25	
	Northcentral University	0	15	
	• Master's degree	0	11	
	• Doctoral degree	0	4	
	Point Loma Nazarene University	0	14	
	• Bachelor's degree	0	14	
	San Diego State University	0	312	
	• Bachelor's degree	0	252	
	• Master's degree	0	60	
	University of California-San Diego	0	914	
	• Bachelor's degree	0	548	
	• Master's degree	0	331	
	• Doctoral degree	0	35	
	University of San Diego	0	37	
	• Bachelor's degree	0	37	
11.0802	Data Modeling/Warehousing and Database Administration	0	8	8
	San Diego State University	0	8	
	• Postbaccalaureate certificate	0	8	

TOP or CIP Code	TOP or CIP Program Title	3-Yr Annual Average CC Awards	Other Institutions 3-Yr Annual Average Awards	Total Average Supply
30.3001	Computational Science	0	15	15
	San Diego State University	0	7	
	• Postbaccalaureate certificate	0	1	
	• Master's degree	0	2	
	• Doctoral degree	0	4	
	University of California-San Diego	0	8	
	• Master's degree	0	8	
30.7001	Data Science, General	0	20	20
	Point Loma Nazarene University	0	1	
	• Bachelor's degree	0	1	
	University of San Diego	0	19	
	• Master's degree	0	19	
30.7101	Data Analytics, General	0	0	0
30.7103	Data Visualization	0	0	0
	Total	802	1,584	2,386

Demand vs. Supply

Comparing labor demand with the conservative estimate of educational supply¹⁷ suggests that there is an oversupply for *Artificial Intelligence Occupations* in San Diego County, with 2,318 annual openings and 2,386 average annual awards. Comparatively, California has 31,450 projected annual openings and a conservative estimate of 15,880 annual awards across the selected CIP set, suggesting a statewide supply gap (Exhibit 9).¹⁸

Exhibit 9: Labor Demand (Annual Openings) Compared with Labor Supply (Average Annual Awards)

	Demand (Annual Openings)	Supply (Average Annual Awards)	Supply Gap or Oversupply
San Diego	2,318	2,386	-68
California	31,450	15,880	15,570

Please note: This is a basic analysis of supply and demand of labor. The data does not include workers currently in the labor force who could fill these positions or workers who are not captured by publicly available data. This data should be used to discuss the potential gaps or oversupply of workers; however, it should not be the only basis for determining whether or not a program should be developed.

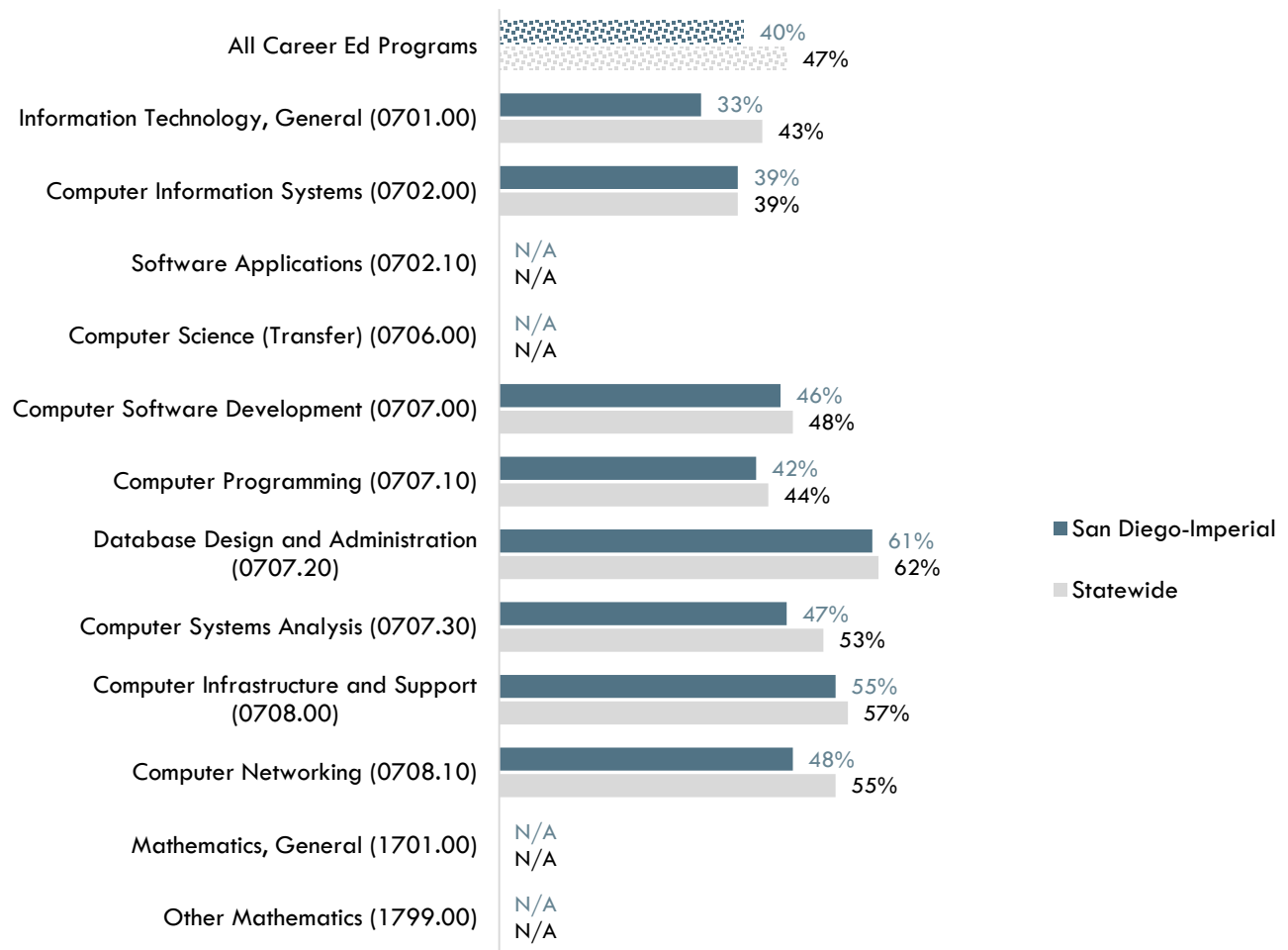
¹⁷ Labor supply can be found from two different sources: Lightcast or the California Community Colleges Chancellor's Office MIS Data Mart. Lightcast uses CIP codes while MIS uses TOP codes. Different coding systems result in differences in the supply numbers.

¹⁸ "Supply and Demand," Centers of Excellence Student Outcomes, coecc.net/our-resources.

Student Outcomes and Regional Comparisons

According to the California Community Colleges DataVista, 33% to 61% of students in the San Diego-Imperial region earned a living wage after completing a program related to Artificial Intelligence Occupations, compared to 39% to 62% statewide and 47% of students in Career Education programs in general across the state (Exhibit 10).¹⁹

Exhibit 10: Percentage of Students Who Earned a Living Wage by Program, PY2023-24²⁰



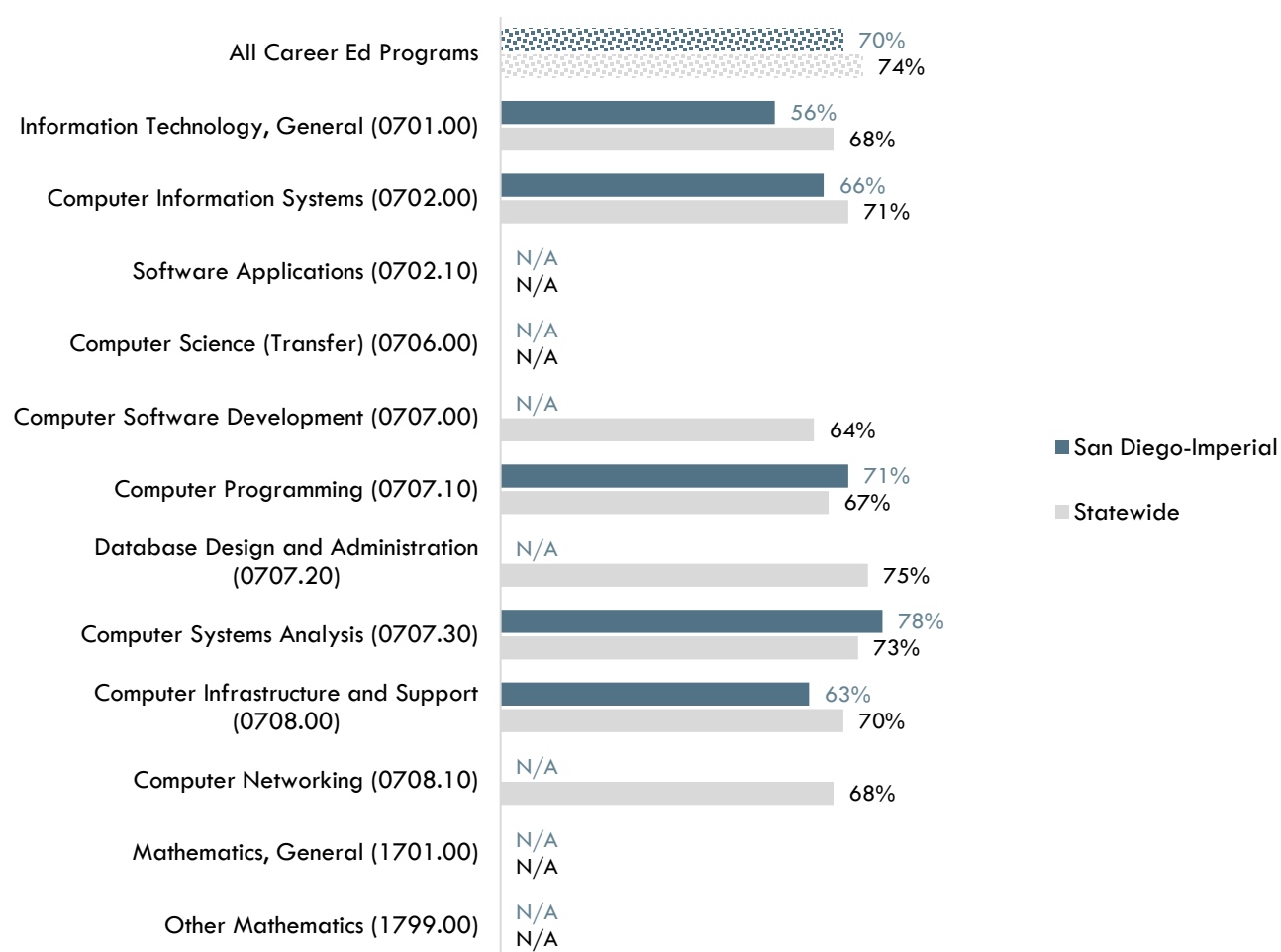
"N/A" indicates insufficient data

¹⁹ California Community Colleges DataVista. datavista.cccco.edu

²⁰ Most recent year with available data is Program Year 2023–24. The measure reports the percentage of completers and skills builders who exited and attained a living wage.

According to the California Community Colleges DataVista, 56% to 78% of students in the San Diego-Imperial region obtained a job closely related to their field of study after completing a program related to Artificial Intelligence Occupations, compared to 64% to 75% statewide and 74% of students in Career Education programs in general across the state (Exhibit 11).²¹

Exhibit 11: Percentage of Students in a Job Closely Related to Field of Study by Program, PY2022-23²²



"N/A" indicates insufficient data

²¹ California Community Colleges DataVista. datavista.cccco.edu

²² Most recent year with available data is Program Year 2022–23. The measure reports the percentage of CTE Outcomes Survey respondents employed in the same or a similar field as their program of study.

Employers

Between January 1, 2023 and December 31, 2025, the top employers in San Diego County for Artificial Intelligence Occupations included [Apple](#), [Qualcomm](#), [Leidos](#), [Accenture](#), and [General Atomics](#), based on online job postings (Exhibit 12).

Exhibit 12: Top Employers for Artificial Intelligence Occupations in San Diego County²³

Top Employers	
• Apple • Qualcomm • Leidos • Accenture • General Atomics	• Northrop Grumman • ServiceNow • Booz Allen Hamilton • Intuit • Amazon

Skills

Exhibit 13 lists the top specialized, soft, and software skills that appeared in general occupational online job postings between January 1, 2023 and December 31, 2025.

Exhibit 13: Top Skills for Artificial Intelligence Occupations in San Diego County²⁴

Specialized Skills	Soft Skills	Software Skills
• Computer Science • Software Engineering • Software Development • Agile Methodology • Automation • Systems Engineering • Debugging • Project Management • Scalability • Machine Learning	• Communication • Management • Problem Solving • Leadership • Operations • Innovation • Troubleshooting • Planning • Research • Presentations	• Python • C++ • SQL • Amazon Web Services • Java • Linux • C • Application Programming Interface • JavaScript • Microsoft Azure

²³ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

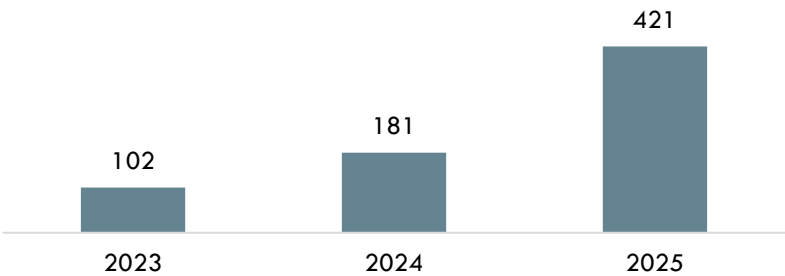
²⁴ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025. Skills must populate in at least 10% of job postings to be listed.

Other LMI to Consider

Traditional LMI classifies workers by formal SOC occupation, but employers do not always use formal occupational titles when advertising AI work. To provide additional real-time context, this section follows the methodology used in the completed September 2023 *Artificial Intelligence Occupations* report and analyzes online job postings between January 1, 2023 and December 31, 2025 for the four selected occupations that also matched Lightcast’s “AI” Skills & Qualifications group (63 matching skills and qualifications). The AI-focused workbook returned 704 unique postings, compared with 34,810 unique postings for the four occupations overall. Online job postings do not equal labor market demand; employers may post a position multiple times, leave a posting active after deciding not to fill it, or use one posting to fill multiple positions. Refer to Appendix A for the 63 skills and qualifications included in the Lightcast “AI” Skills & Qualifications group.

AI-focused postings increased each year over the period analyzed, from 102 in 2023 to 421 in 2025 (Exhibit 14).

**Exhibit 14: Number of AI-Focused Online Job Postings for
Artificial Intelligence Occupations in San Diego County (2023-2025)²⁵**



²⁵ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025; AI Skills & Qualifications filter.

Between January 1, 2023 and December 31, 2025, 704 unique online job postings for *Artificial Intelligence Occupations* in San Diego County matched Lightcast's "AI" Skills & Qualifications group, representing 2.0% of 34,810 unique postings (Exhibit 15).

**Exhibit 15: General and AI-Focused Online Job Postings by Occupation
in San Diego County (2023-2025)²⁶**

Occupational Title	General Unique Postings	AI-Focused Unique Postings	AI Share
Computer and Information Research Scientists	1,990	298	15.0%
Computer Occupations, All Other	11,555	57	0.5%
Data Scientists	5,519	83	1.5%
Software Developers	15,746	266	1.7%
Total	34,810	704	2.0%

²⁶ Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025.

Applying each occupation's share of AI-focused unique postings between January 1, 2023 and December 31, 2025 to projected annual job openings results in an estimated 43 annual openings with an AI-skills signal (Exhibit 16). This estimate is provided for curriculum-planning purposes and does not replace traditional occupational demand.

Exhibit 16: Estimated Annual Openings with an AI-Skills Signal in San Diego County (2023-2025)²⁷

Occupational Title	Annual Openings	AI Posting Share	Estimated AI-Signal Openings
Software Developers	1,413	1.7%	24
Computer and Information Research Scientists	86	15.0%	13
Computer Occupations, All Other	646	0.5%	3
Data Scientists	173	1.5%	3
Total	2,318	2.0%	43

²⁷ Lightcast Q3 2026; QCEW, Non-QCEW, Self-Employed; Job Posting Analytics, January 2023 through December 2025. Estimated AI-signal openings are rounded to whole openings and do not represent an official demand projection.

Between January 1, 2023 and December 31, 2025, the top employers in San Diego County for AI-focused unique postings were [Qualcomm](#), [Leidos](#), [Intuit](#), [Apple](#), and [Accenture](#). [Qualcomm](#) accounted for 123 unique AI-focused postings (Exhibit 17).

**Exhibit 17: Top Employers in AI-Focused Online Job Postings
in San Diego County (2023-2025)²⁸**

Employer	Unique AI-Focused Postings
Qualcomm	123
Leidos	45
Intuit	39
Apple	35
Accenture	31
ServiceNow	28
General Atomics	25
Amazon	21
Teradata Operations	17
PricewaterhouseCoopers	11

²⁸ Lightcast Q3 2026; AI-focused Job Posting Analytics, January 2023 through December 2025.

Between January 1, 2023 and December 31, 2025, a [bachelor's degree](#) was the most frequently requested minimum education level in AI-focused unique postings, appearing in [452](#) postings. Of [704](#) unique AI-focused postings, [108](#) did not list an education requirement (Exhibit 18).

**Exhibit 18: Minimum Education in AI-Focused Online Job Postings
in San Diego County (2023-2025)²⁹**

Minimum Education Level	Unique Postings	% of AI-Focused Postings
No education listed	108	15.3%
High school or GED	4	0.6%
Associate degree	20	2.8%
Bachelor's degree	452	64.2%
Master's degree	95	13.5%
Ph.D. or professional degree	25	3.6%

²⁹ Lightcast Q3 2026; AI-focused Job Posting Analytics, January 2023 through December 2025.

Between January 1, 2023 and December 31, 2025, [artificial intelligence](#), [machine learning](#), [computer science](#), [Python](#), and [software engineering](#) were the most frequently listed skills in AI-focused unique postings (Exhibit 19).

**Exhibit 19: Top Skills in AI-Focused Online Job Postings
in San Diego County (2023-2025)³⁰**

Specialized Skills	Soft Skills	Software Skills
• Artificial Intelligence • Machine Learning • Computer Science • Software Engineering • Scalability • Algorithms • Data Science • Deep Learning	• Communication • Research • Leadership • Innovation • Problem Solving • Management • Influencing Skills • Operations	• Python • Generative AI • PyTorch • TensorFlow • Amazon Web Services • Microsoft Azure • C++ • Java

³⁰ Lightcast Q3 2026; AI-focused Job Posting Analytics, January 2023 through December 2025. Skills must populate in at least 10% of job postings to be listed.

Between January 1, 2023 and December 31, 2025, employers most frequently listed security and cloud credentials in AI-focused unique postings (Exhibit 20).

**Exhibit 20: Top Certifications in AI-Focused Online Job Postings
in San Diego County (2023-2025)³¹**

- | | |
|--|--|
| 1. Security Clearance | 6. Certified Information Systems Security Professional |
| 2. Secret Clearance | |
| 3. Top Secret-Sensitive Compartmented Information (TS/SCI Clearance) | 7. Master of Business Administration (MBA) |
| 4. Microsoft Certified Professional | 8. TOGAF Certification |
| 5. Top Secret Clearance | 9. Certified Information Security Manager |
| | 10. Certified Cloud Security Professional (CCSP) |

³¹ Lightcast Q3 2026; AI-focused Job Posting Analytics, January 2023 through December 2025.

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Important Disclaimers

All representations included in this report have been produced from primary research and/or secondary review of publicly and/or privately available data and/or research reports. This study examines the most recent data available at the time of the analysis; however, data sets are updated regularly and may not be consistent with previous reports. Efforts have been made to qualify and validate the accuracy of the data and the report findings; however, neither the California Community Colleges Centers of Excellence (COE), COE host district, nor California Community Colleges Chancellor's Office are responsible for the applications or decisions made by individuals and/or organizations based on this study or its recommendations.

Appendix A: Skills and Qualifications Included in the Lightcast “AI” Skills & Qualifications Group³²

The following 63 skills and qualifications comprise the Lightcast “AI” Skills & Qualifications group used to identify AI-focused online job postings. A posting may reference more than one item. This list is provided for methodology transparency and does not represent 63 separate occupations, jobs, or demand estimates.

Skill or Qualification	Skill or Qualification
Agentic AI	AI Adoption
AI Agent Monitoring	AI Agent Observability
AI Agents	AI Algorithms
AI Alignment	AI Assisted Content Generation
AI-Assisted Software Development Tools	AI-Based Legal Compliance
AI Best Practices	AI Bias
AI+ Cloud Certification	AI Copywriting
AI Design	AI+ Developer Certification
AI Driven Predictive Scheduling	AI-Driven Treatment Planning Algorithm
AI Failure	AI+ Foundations Certification
AI-Generated Code	AI in Diagnostics
AI in EHR Systems	AI in Patient Services
AI Incident Response Procedure	AI Innovation
AI Integrations	AI Literacy
AI/ML Inference	AI Personalization
AI-Powered Design Tools	AI-Powered Professional Development
AI Product Strategy	AI Research
AI Safety	AI Security
AI+ Security Level 1 Certification	AI Testing
AI Transcription	AI Translation
Audit Info System (AIS)	AWS AI Tools
Azure AI Language Understanding (LUIS)	Azure AI Studio
Claude AI	Conversational AI
Cursor AI	Customer Engagement Suite with Google AI
Devin AI	Embedded AI
Ethical AI	Explainable AI (XAI)

³² Lightcast Q3 2026; Job Posting Analytics, January 2023 through December 2025; Lightcast “AI” Skills & Qualifications group.

Skill or Qualification	Skill or Qualification
Game AI	Generative AI Agents
Google Quantum AI	Human AI Interaction
Lovable AI	Microsoft Certified: Azure AI Engineer Associate
Microsoft Certified: Azure AI Fundamentals	Neuro Symbolic AI
Operationalizing AI	Responsible AI
SAS Certified Professional: AI & Machine Learning	