UC San Diego EXTENSION

Digital Health Workforce Data Study Spring 2021

Robert Houghtaling Department of Healthcare Research & Policy UC San Diego Extension Market Analysis Workforce Insights **Digital Health**

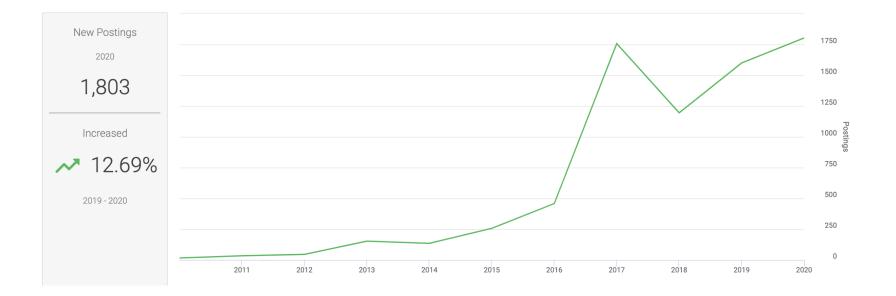


extension.ucsd.edu/digitalhealth

Labor market analysis using search criteria: Last 90 days (Jan. 1, 2021 - Mar. 31, 2021) | Nationwide | Job Title with Digital Health

Increase in Jobs Demand

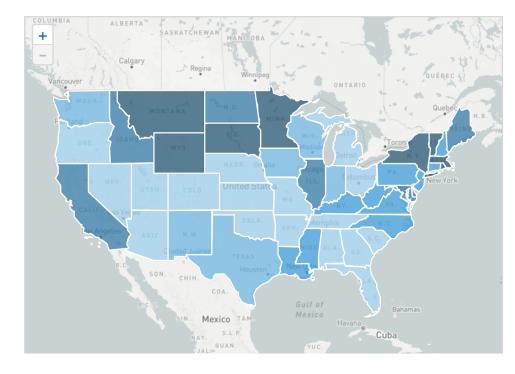
The number of job postings requesting Digital Health knowledge and skills has been increasing and appearing in different sectors over the last several years.







During the last 3 months



TOP 15 HIRING REGIONS

State	Location Quotient	Job Postings
California	1.4 ^	387
Massachusetts	3.7 🕿	220
New York	1.7 🕿	148
Illinois	1.4 ^	122
Texas	0.7 ~	119
Minnesota	1.8 🕿	81
Pennsylvania	1.0 🗕	71
North Carolina	0.9 —	67
Virginia	1.0 —	60
New Jersey	1.0 —	56
Maryland	1.4 ^	53
Florida	0.4 🎽	50
District of Columbia	3.0 🕿	45
Washington	0.8 ~	43
Georgia	0.5 😽	38

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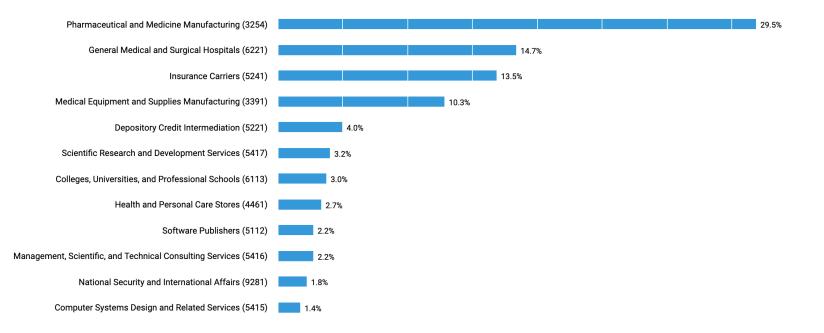
Top Hiring Metropolitan Statistical Areas (MSA's) During the last 3 months



Metro Area	Location Quotient	Job Postings
Boston-Cambridge-Nashua, MA-NH (Metropolitan NECTA)	4.8 🕿	218
New York-Newark-Jersey City, NY-NJ-PA (Metropolitan Statistical Area)	1.7 🕿	165
San Francisco-Oakland-Hayward, CA (Metropolitan Statistical Area)	3.2 🕿	160
Washington-Arlington-Alexandria, DC-VA-MD-WV (Metropolitan Statistical Area)	2.2 🕿	116
Chicago-Naperville-Elgin, IL-IN-WI (Metropolitan Statistical Area)	1.3 🔨	86
Los Angeles-Long Beach-Anaheim, CA (Metropolitan Statistical Area)	0.9 -	77
Dallas-Fort Worth-Arlington, TX (Metropolitan Statistical Area)	0.9 —	55
San Diego-Carlsbad, CA (Metropolitan Statistical Area)	1.9 🕿	47
Atlanta-Sandy Springs-Roswell, GA (Metropolitan Statistical Area)	0.9 —	38
San Jose-Sunnyvale-Santa Clara, CA (Metropolitan Statistical Area)	1.6 🕿	37
Philadelphia-Camden-Wilmington, PA-NJ-DE-MD (Metropolitan Statistical Area)	0.8 ~	36
Minneapolis-St. Paul-Bloomington, MN-WI (Metropolitan Statistical Area)	1.0 -	33
Seattle-Tacoma-Bellevue, WA (Metropolitan Statistical Area)	0.9 —	30
Providence-Warwick, RI-MA (Metropolitan NECTA)	4.0 🕿	29
Austin-Round Rock, TX (Metropolitan Statistical Area)	1.3 🔨	27



Top Industries During the last 3 months

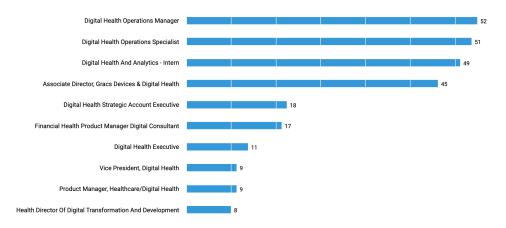




Top Employers During the last 3 months

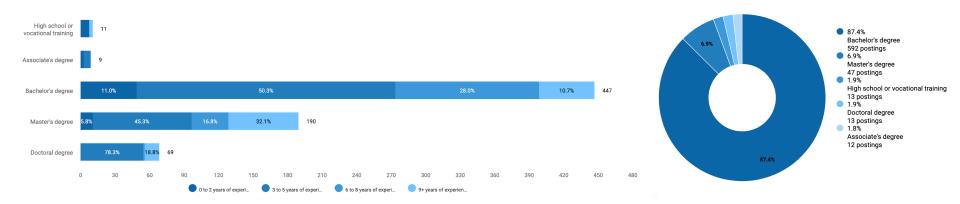
Employer	Job Postings
Docs	102
Humana	75
Merck & Company	49
Hill Rom	48
Wells Fargo	25
Mayo Foundation for Medical Education and Research	23
CVS Health	16
Johnson & Johnson	12
OSF HealthCare	12
Mass General Brigham	10
Vynyl High Fidelity Software And Design	9
Boston Scientific Corporation	8
Guidehouse	8
Hillrom	8
Mathematica Policy Research	8
Ochsner Clinic Foundation	8
Partners Healthcare	8
Deloitte	7

Top Titles During the last 3 months



Experience by Education

During the last 3 months Preferred and minimum/required education levels listed in job postings.

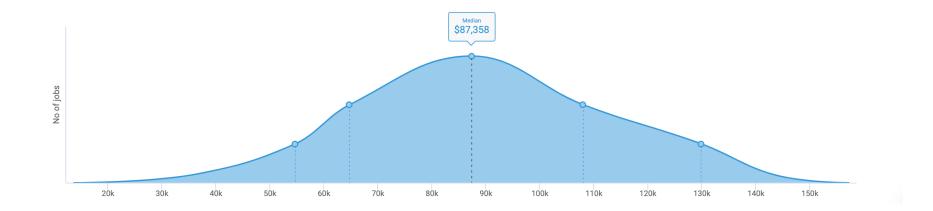




Median Salary

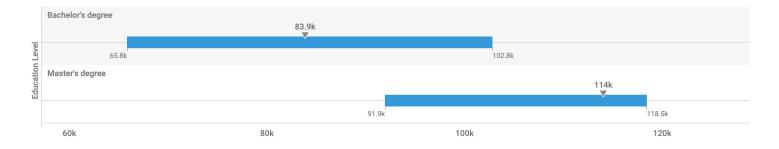
During the last 3 months

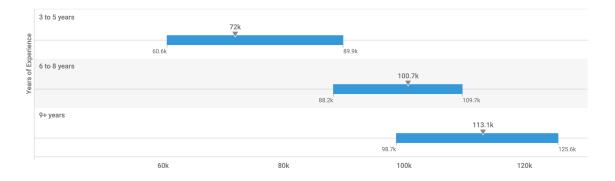
Market Salary is calculated using a machine learning model built off of millions of job postings every year, and accounting for adjustments based on locations, industry, skills, experience, education requirements, among other variables.



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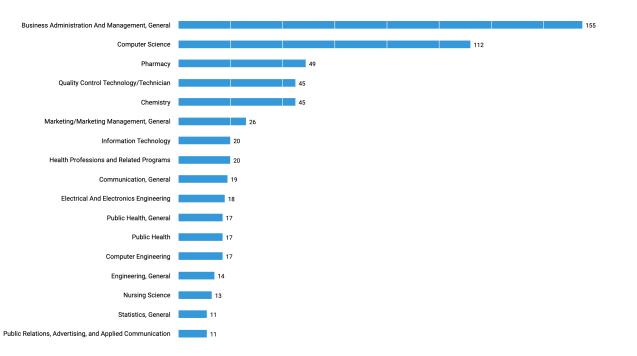
Salary Ranges by Education Level and Experience





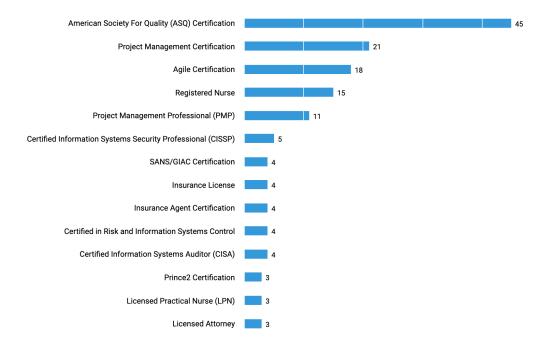


Programs of Study in Demand





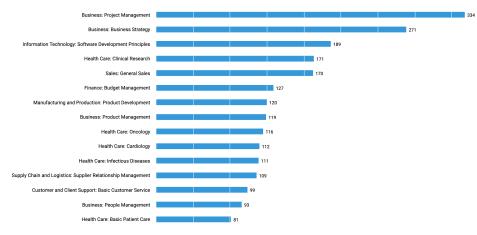
Certifications in Greatest Demand

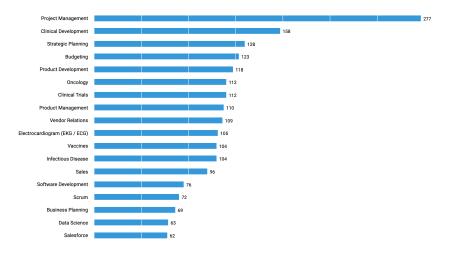




Skill Clusters in Demand

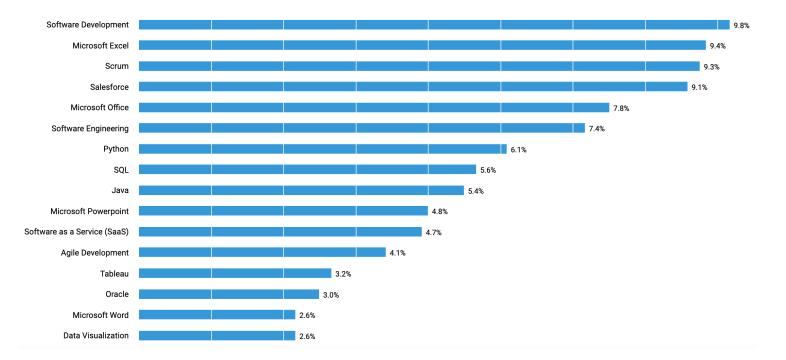
Specialized Skills in Demand







Skill in Greatest Demand: Software & Programming





Market Demand and Requirements by Occupation

During the last 3 months

This table comes from BLS/OES data. Occupational Employment Statistics (OES) merges several occupations for reporting purposes. Burning Glass estimates the employment for individual occupations based on historic distribution.

Occupation Title	Number of Job Postings	Risk of Automation ⑦	Number Employed 2019	% Change in Employment, 2018-2019	Projected National Change in Employment, 2016-2026 ⑦	Mean Market Salary, last 12 months ⑦
General and Operations Managers	81	Low Risk	2,400,280	5%	9.1%	\$113,590
Marketing Managers	72	Low Risk	263,680	10%	10.1%	\$114,404
Medical and Health Services Managers	59	Low Risk	394,910	6%	20.5%	\$116,572
Computer Occupations, All Other	47	Low Risk	360,371	-6%	9.3%	\$107,804
Natural Sciences Managers	45	Low Risk	67,720	12%	9.9%	\$90,029
Software Developers, Applications	37	Low Risk	971,065	8%	30.7%	\$94,439
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	36	Medium Risk	1,344,530	0%	5.2%	\$80,755
Managers, All Other	26	Low Risk	472,060	2%	8.0%	\$105,392
Market Research Analysts and Marketing Specialists	19	Medium Risk	678,500	6%	23.2%	\$71,119
Financial Managers	18	Low Risk	654,790	8%	18.7%	\$96,813



Job Titles by Category Medical and Health Service Managers

During the last 3 months

The projected national change for employment for Medical and Health Service Managers from 2016-2026 is 20.5%

Medical and Health Services Managers

Job Titles	Job Postings
Health Director Of Digital Transformation And Development	8
Director Consultant In Digital Health And Innovation	7
Associate Director, Digital Strategist, Health	б
Senior Digital Sales Director, Health Data Solutions Signal/Hcp	3
Digital Health Program Coordinator - Ambulatory - Digital Health	2
Digital Health Services Senior Product Manager	2
Lead It Solutions Developer - Digital & Health Services	2
Operations Program Manager Digital Health & Innovation	2
Capgemini Invent Innovation And Strategy- Principal/Director- Life Sciences - Digital Health	1



58

Job Titles by Category Marketing Managers

During the last 3 months The projected national change for employment for Marketing Managers from 2016 - 2026 is 10.1%

Marketing Managers	68
Job Titles	Job Postings
Product Manager, Healthcare/Digital Health	9
Senior Product Manager - Digital Health & Analytics	8
Head Of Digital Marketing For Health Practice	6
Product Manager - Digital Health	5
Associate Director, Change Leadership, Digital Marketing And Commercial Excellence, Human Health	2
Director Of Product Marketing - Digital Health And Population Health Analytics	2
Group Marketing Manager, Connectivity & Digital Health Solutions	2
Product Manager, Digital Health	2
Product Manager-Digital Health	2



Job Titles by Category Management

During the last 3 months

The projected national change for employment for Managers from 2016 - 2026 is 8.0%

Job Titles	Job Postings
Digital Health Operations Manager	52
Vice President, Digital Health	8
Digital Cons Credit Health Journey Product Owner	7
Vice President Digital Health	3
Vice President-Digital Health	2
Director Of Commercial Operations Auris Health, Inc - Johnson & Johnson Robotics And Digital Solutions	1
Management Consultant 2 Digital Health Operations	1
Management Consultant 2 Digital Health Operations In	1
Public Health Administrator II Digital Platform Build	1



Job Titles by Category Sales Representatives and Manufacturing

During the last 3 months

The projected national change for employment for Sales Representatives and Manufacturing from 2016-2026 is 5.2%

Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	36
Job Titles	Job Postings
Digital Health Strategic Account Executive	18
Account Manager , Auris Health, Inc Johnson & Johnson Robotics And Digital Solutions	5
Account Executive, Digital Health	1
Account Manager , Pa Auris Health, Inc Johnson & Johnson Robotics And Digital Solutions	1
Account Manager Auris Health, Inc Johnson & Johnson Robotics And Digital Solutions	1
Digital Health Account Manager	1
Entry Level Enterprise Digital Health Salesman	1
Pre-Sales Business Development - Cro Digital Health Products Remote	1
Project Coordinator - Digital Health & Business Development	1



Job Titles by Category Software Developers, Application

During the last 3 months

The projected national change for employment for Software Developers, Applications from 2016-2026 is 30.7%

Software Developers, Applications	34
Job Titles	Job Postings
Lead Software Engineer - Digital Health Platform	5
Senior Java Engineer - Digital Health Platform	5
Software Engineer Cloud - Digital Health Products	5
Cloud Data/Devops Engineer Enterprise Data & Digital Health	3
Software Architect Vara Digital Health Platform	2
Azure Cloud Engineer Enterprise Data & Digital Health	1
Collibra Engineer, Enterprise Data And Digital Health	1
Digital Health Integration Consultant	1
Digital Health Platform Senior Software Developer	1
Digital Health Platform Software Developer	1



Job Titles by Category Computer System Engineers/Architects

During the last 3 months

The projected national change for employment for Sales Representatives and Manufacturing from 2016 - 2026 is 5.2%

Computer Systems Engineers/Architects	14
Job Titles	Job Postings
Solutions Architect - Digital Health Solutions	3
Principal Digital Health Solutions Architect	2
Digital Health Cloud Architect	1
Digital Health Service Architect	1
Digital Health Solutions Architect	1
It Support Engineer - Thriving Digital Health Startup	1
Java Architect - Digital Health Platform	1
Lead Digital Health Cloud Architect	1
Principal Architect - Digital Health Cloud	1
Principal Digital Health Cloud Architect	1



Job Titles by Category Managers, All Other

During the last 3 months The projected national change for employment for Managers, All Other from 2016 2026 is 8.0%

Managers, All Other	23
Job Titles	Job Postings
Senior Implementation Manager - Digital Health & Innovation	2
Senior Program Manager - Digital Health Technologies	2
Strategy Insights & Planning Manager/Digital Connected Health	2
Strategy Insights & Planning Manager/Digital Connected Health Area,	2
Content Manager, Digital Health Remote	1
Digital Health Associate Project Manager	1
Digital Health Diabetes Engagement & Content Manager	1
Implementation Manager - Digital Health	1
Integration Project Specialist, Digital Health Innovation	1
Manager Digital Health	1



UC San Diego Extension Specialized Certificate in Digital Health Certificate Background

Program developed from 2019-2021 and is designed specifically to provide graduates with the foundational knowledge and skills needed to work in current digital health and innovation roles.

Program allows interdisciplinary practitioners, healthcare, investor, startup, pharmacy, and technology professionals to gain new skills in specialty emerging areas such as Data Science, AI, Connected Devices, UX Design, Blockchain, and healthtech business.

Teaches the fundamentals of the rapidly evolving field of Digital Health and topics associated with the disruption of healthcare. Courses are offered 100% online and include guest lectures from leading SME's with diverse academic and industry backgrounds. Combines aspects of healthcare administration, public health, ethics, and strategies for commercialization and business.

Courses analyze new opportunities for digital technology to improve individual and population health outcomes and provide innovative solutions within the complex industry of healthcare. Updated curriculum supplements medical school training with skills and experience to remain competitive.



Specialized Certificate in Digital Health Program Faculty

Program faculty are industry leaders in academia and the healthcare technology, investment, startup fields and provide extensive real-world experience. Program core faculty for 2021:

- Daniel Haders II, PhD, Managing Director, Healthcare Tech, Nex Cubed Digital Health Business and Commercialization Strategies course co-instructor
- Basker Gummadi MS, PMP, PgM Senior Director, DigitalTherapeutics Bristol Myers Squibb Digital Innovation in Translational and Clinical Research course instructor
- Hobson Lane, MA, Author and Data Scientist: Data Science for Digital Health course instructor
- Tim K. Mackey, MAS, PhD Associate Professor at UCSD, and co- Founder and CEO S-3 Research Program Director and Introduction to Digital Health course instructor
- Ramin Rafiei, PhD, Senior Digital Healthcare Executive Digital Health Business and Commercialization Strategies course instructor
- John Sjölund, Msc CEO & Co-Founder, Luna Diabetes Case Studies in Digital Health course instructor



UC San Diego Extension Department of Healthcare Research and Policy

UCTV Webinar: <u>Why Digital Health is more</u> <u>important than ever</u>. Program provides an overview of the current Digital Health ecosystem and how it is being leveraged to fight COVID-19.



Recent interview with Hobson Lane, Author and Data Scientist about his <u>UCSD Extension Data</u> <u>Science for Digital Health course</u>, and emerging healthcare industry trends. In depth interview with Dr. Ramin Rafiei, Senior Digital Healthcare Executive, investor, and UCSD Extension instructor. <u>What Digital Health Can</u> <u>Solve in a Global Crisis?</u>







UC San Diego School of Medicine

Learn More

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