



THE CONNECTION

Economic Development and Our Community

*STEM Employment Growth -
Projected Growth in
DFW STEM Employment,
2019 to 2029:
Computer Occupations*

Published February 24, 2021

The Dallas-Fort Worth region is expected to create about **50 thousand STEM jobs** between 2019 and 2029. This projected growth will add to an estimated **63 thousand** STEM jobs gained in the preceding decade, from 2009 to 2019.

Computer occupations are a major driver of the overall STEM employment growth, as they account for **64%** of expected STEM jobs gain, or **31 thousand new jobs** between 2019 and 2029. Around **4.5%** of the DFW workforce will be employed in computer occupations in 2029; in 2019, this number was **4.0%** and in 2009, **3.5%**.

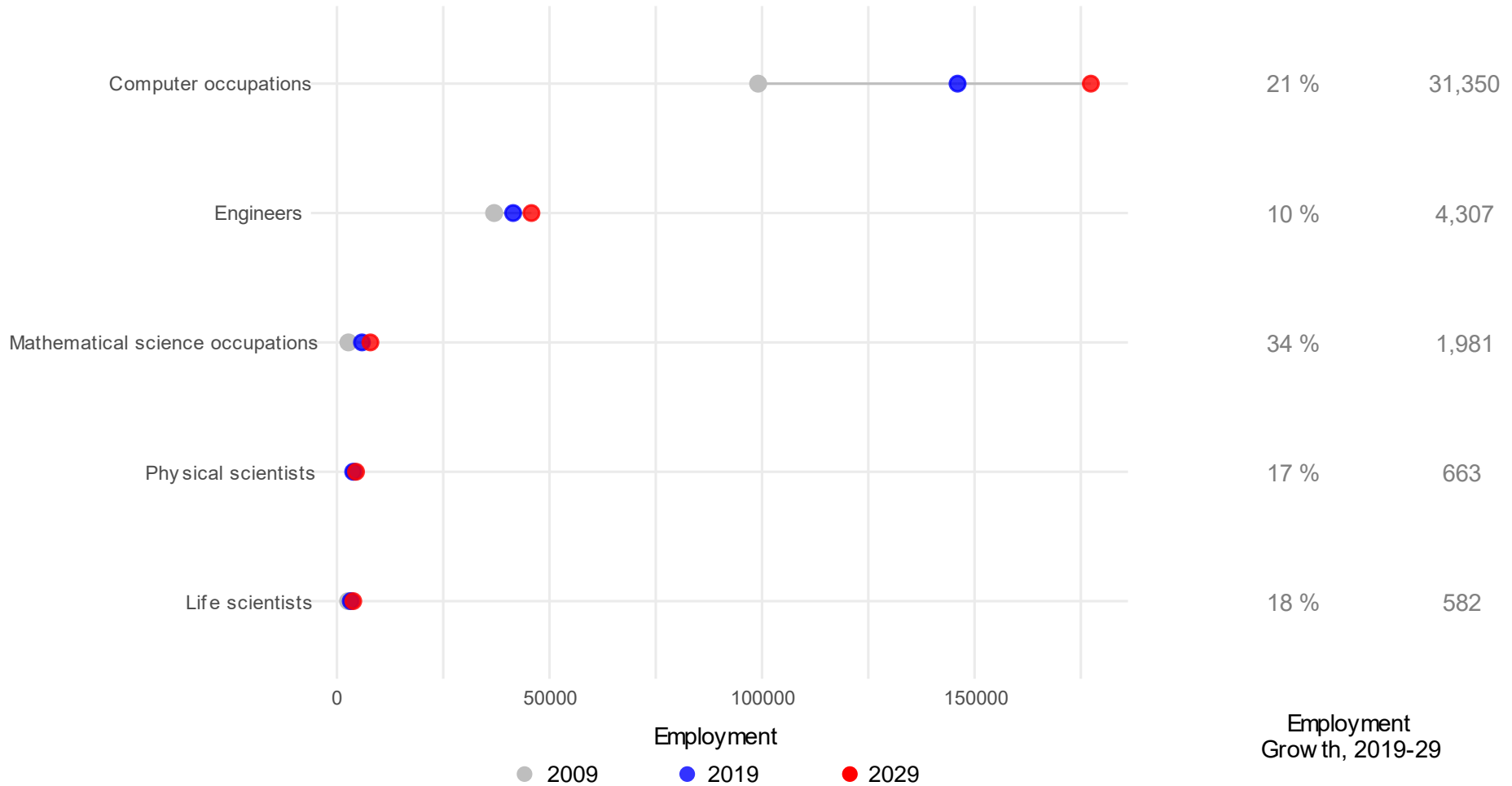
These gains are due in large part to rapidly increasing demand for **software developers and software quality assurance analysts and testers**, an occupation which is expected to grow by **30%**, or **15 thousand jobs**, within the next decade.

Furthermore, computer occupations will become more concentrated in DFW. By 2029, around **2.5%** of all American jobs will be located in DFW. A much higher percentage (**3.4%**) of all American **computer occupations** jobs will be located in DFW – up from just over 3% in 2009.

The University of Texas at Dallas is preparing students to fill those expected positions. See *slide 8* for more information about computer occupations-related academic programs.



Projected Employment Growth by STEM Occupational Group Dallas - Fort Worth



Source: Emsi, 2021.

Projected Employment Growth by STEM Occupational Group

Dallas - Fort Worth

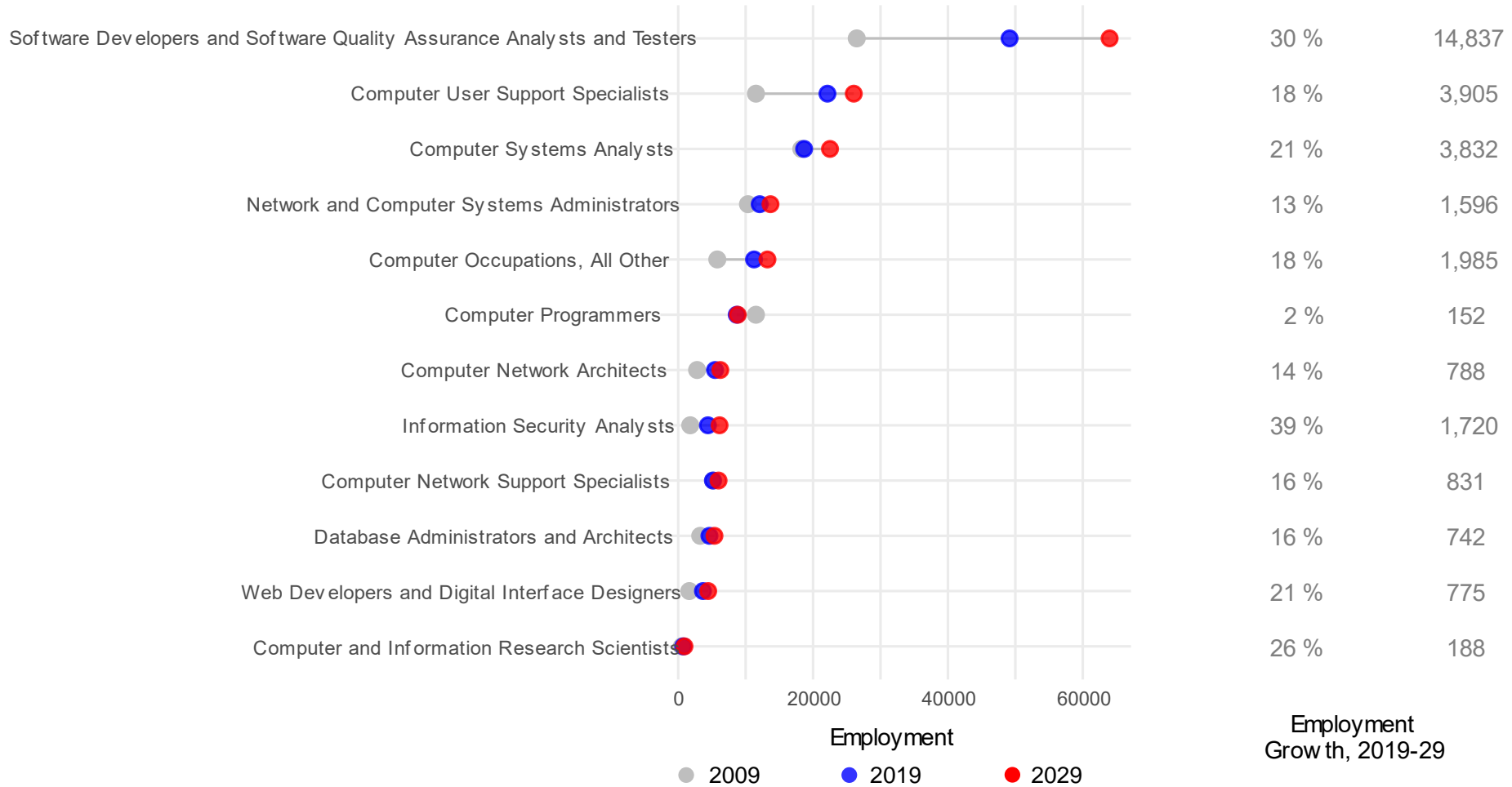
Occupation	Employment		Employment Change	
	2019	2029	2019-29	2019-29
STEM occupations (excluding education)	303,824	353,144	16%	49,320
Computer occupations	146,000	177,350	21%	31,350
Engineers	41,439	45,746	10%	4,307
Mathematical science occupations	5,877	7,858	34%	1,981
Physical scientists	3,816	4,479	17%	663
Life scientists	3,243	3,825	18%	582

United States

Occupation	Employment		Employment Change	
	2019	2029	2019-29	2019-29
STEM occupations (excluding education)	10,838,600	11,887,929	10%	1,049,329
Computer occupations	4,394,409	5,038,034	15%	643,625
Engineers	1,804,726	1,913,503	6%	108,776
Mathematical science occupations	200,322	253,390	26%	53,068
Physical scientists	265,822	287,155	8%	21,333
Life scientists	332,611	361,160	9%	28,549



Projected Employment Growth in Computer Occupations Dallas - Fort Worth





Projected Employment Growth in Computer Occupations

Dallas - Fort Worth

Occupation	Employment		Employment Change	
	2019	2029	2019-29	2019-29
Computer occupations	146,000	177,350	21%	31,350
Software developers and software quality assurance analysts and testers	49,146	63,983	30%	14,837
Computer user support specialists	22,131	26,036	18%	3,905
Computer systems analysts	18,675	22,508	21%	3,832
Information security analysts	4,405	6,125	39%	1,720
Network and computer systems administrators	12,083	13,679	13%	1,596
Computer network support specialists	5,149	5,981	16%	831
Computer network architects	5,455	6,243	14%	788
Web developers and digital interface designers	3,669	4,444	21%	775
Database administrators and architects	4,629	5,371	16%	742
Computer and information research scientists	736	924	26%	188
Computer programmers	8,675	8,827	2%	152
Other	11,246	13,230	18%	1,985



Projected Employment Growth in Computer Occupations

United States

Occupation	Employment		Employment Change	
	2019	2029	2019-29	2019-29
Computer occupations	1,433,302	1,774,487	24%	341,186
Software developers and software quality assurance analysts and testers	647,419	718,419	11%	71,001
Computer user support specialists	592,993	658,101	11%	65,109
Computer systems analysts	127,149	166,767	31%	39,618
Information security analysts	350,225	375,269	7%	25,044
Network and computer systems administrators	183,981	199,543	8%	15,563
Computer network support specialists	153,184	165,573	8%	12,390
Computer network architects	147,794	168,359	14%	20,565
Web developers and digital interface designers	123,982	138,454	12%	14,472
Database administrators and architects	33,339	39,889	20%	6,550
Computer and information research scientists	198,995	192,339	-3%	-6,656
Computer programmers	402,048	440,833	10%	38,785
Other	1,433,302	1,774,487	24%	341,186

UT Dallas Programs Preparing Students for Computer Occupations

Program	Enrollment (Fall 2019)
Arts, Technology, and Emerging Communication	
BA	1,458
MA/MFA	28
PhD	26
Bioinformatics and Computational Biology	
MS	22
Computer Engineering	
BS	537
MS	62
PhD	27
Computer Science	
BS	2,801
MS	1,039
PhD	147
Information Technology and Systems	
BS	834
Information Technology and Management	
MS	719
Software Engineering	
BS	476
MS	63
PhD	20



Questions?

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