

Occupation Report



Software and Web Developers, Programmers, and Testers

South Carolina







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# Wages



| **Occupation** | **Mean** | **Median** | **Entry Level** | **Experienced** |
| --- | --- | --- | --- | --- |
| Software Developers and Software Quality Assurance Analysts and Testers | $92,400 | $86,000 | $52,800 | $112,200 |
| Computer Programmers | $78,100 | $77,300 | $48,100 | $93,100 |
| Web Developers and Digital Interface Designers | $75,600 | $72,900 | $44,100 | $91,300 |

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| --- | --- | --- |
|  |  | Occupation wages here are based on data from the Bureau of Labor Statistics, OES program, and imputed by Chmura where necessary.  |
|  |  | When this report is run for an occupation group, the table above displays up to the top ten detailed occupations which have the highest average wages within the occupation group. |

# Education Profile



| **Occupation** | **Typical Entry-Level Education** | **Previous Work Experience** | **Typical On-the-Job Training** |
| --- | --- | --- | --- |

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| --- | --- | --- |
|  |  | The stacked bar chart here illustrates the estimated mix of educational attainment of the workers in this occupation(s) in aggregate. |
|  |  | The table indicates typical education and training requirements rather than the mix of attainment of workers in such positions. |

# Top Skill and Certification Gaps

| **Top 10 Skill Gaps in South Carolina** |
| --- |
| **Name** | **Candidates** | **Openings** | **Gap** |
| Microsoft .NET Framework (.Net) | 108 | 207 | -99 |
| Structured Query Language (SQL) | 340 | 411 | -71 |
| Agile | 249 | 314 | -64 |
| Microsoft Visual Studio Team Foundation Server (TFS) | 33 | 89 | -56 |
| Microsoft Visual Studio | 55 | 109 | -53 |
| Scrum | 90 | 140 | -50 |
| Model View Controller (MVC) | 79 | 122 | -43 |
| Microsoft Internet Information Service (IIS) | 16 | 54 | -38 |
| Visual Basic .NET (VB.NET) | 25 | 61 | -37 |
| Amazon Web Services (AWS) | 115 | 151 | -35 |

| **Top 10 Certification Gaps in South Carolina** |
| --- |
| **Name** | **Candidates** | **Openings** | **Gap** |
| Certified ScrumMaster (CSM) | 2 | 11 | -9 |
| Oracle Certified | 0 | 3 | -3 |
| Certified Scrum Professional (CSP) | 0 | 2 | -2 |
| Certified Scrum Developer (CSD) | 0 | 2 | -2 |
| Cisco Certified Network Professional (CCNP) | 0 | 1 | -1 |
| Certified Information Systems Auditor (CISA) | 0 | 1 | -1 |
| Certified Technology Specialist (CTS) | 0 | 1 | -1 |
| Cisco Certified Network Associate (CCNA) | 0 | 1 | 0 |
| Microsoft Certified Solution Developer (MCSD) | 2 | 2 | 0 |
| Project Management Professional (PMP) | 2 | 1 | 0 |

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| --- | --- | --- |
|  |  | Skill and certifications gaps can help inform employee development programs, as well as provide a comparison of the needs of regional employers to the supply. |

# Data Notes

* Occupation employment by default indicates employment by place of work. Occupation employment is as of 2020Q3 and is based on industry employment and local staffing patterns calculated by Chmura and utilizing BLS OES data. Employment forecasts are modeled by Chmura and are consistent with BLS national-level 10-year forecasts. Occupation wages (mean, median, and percentiles) are derived from BLS OES data and are as of 2019 and represent the average for all Covered Employment. Entry-level and experienced wages are derived from these source data, computed by Chmura.
* Industry employment is as of 2020Q3 and is based upon BLS QCEW data, imputed by Chmura where necessary, and supplemented by additional sources including Census ZBP data.
* Education and training requirements are from the BLS. Educational attainment mix and other occupation demographics data are modeled by Chmura for 2020Q3 using regional occupation employment from JobsEQ, ZCTA-level demographics data from the Census Bureau, and national occupation-demographics patterns from the BLS.
* Postsecondary awards are per the NCES and are for the 2018-2019 academic year. Any programs shown are linked with the occupation(s) being analyzed via the program-occupation crosswalk, which may not be comprehensive. Any programs shown reflect only data reported to the NCES; reporting is required of all Title IV schools. Training providers that do not report data to the NCES are not reflected.
* Job ads data are online job posts from the Real-Time Intelligence (RTI) data set, produced wholly by Chmura and gleaned from over 30,000 websites. Data reflect ads active during the last twelve month period ending 04/15/2021 and advertised for any Zip Code Tabulation Area in or intersecting with the region for which this report was produced. Historical ad volume is revised as additional data are made available and processed. Since many extraneous factors can affect short-term volume of online job postings, time-series data can be volatile and should be used with caution. All ad counts represent deduplicated figures.
* For skill and certification gaps, openings and candidates are based upon regional occupation demand (growth plus separations) and the percent of skill demand and supply. Skill demand mix data are per a one-year sample of RTI data; skill supply data are estimated using a five-year sample of resumes data; both data sets compiled as of January 2021. Data may be based, at least in part, on data from broader geographies; see the Skill Gaps analytic export for more details.
* Occupation gaps are modeled by Chmura, indicating long-term potential supply and demand mismatches in a region due, in part, to job demand and labor pool dyanamics, including educational attainment and projected growth.
* Occupation employment by place of residence is as of 2020Q3 and modeled by Chmura based upon occuaption employment by place of work and commuting patterns. Commuting patterns are derived from source data from the Census Bureau, occupation-specific commuting tendancies, and updated to reflect more recent population and employment estimates.
* Figures may not sum due to rounding.

# FAQ

What is (LQ) location quotient?

Location quotient is a measurement of concentration in comparison to the nation. An LQ of 1.00 indicates a region has the same concentration of an industry (or occupation) as the nation. An LQ of 2.00 would mean the region has twice the expected employment compared to the nation and an LQ of 0.50 would mean the region has half the expected employment in comparison to the nation.

What is annual demand?

Annual demand is a of the sum of the annual projected growth demand and separation demand. Separation demand is the number of jobs required due to separations—labor force exits (including retirements) and turnover resulting from workers moving from one occupation into another. Note that separation demand does not include all turnover—it does not include when workers stay in the same occupation but switch employers. Growth demand is the increase or decrease of jobs expected due to expansion or contraction of the overall number of jobs.