Software Developers, Applications and Software Assurance Analyts and Testers

What They Do
Develop, create and modify computer applications that allow people to do specific tasks on a computer or other device. Some develop the underlying systems that run devices or control networks. They analyze user needs and develop software that solves problems or makes processes more efficient.

Is This For You?
Work Interests are described in the following categories (compatible with Holland’s Model). People who tend to succeed in this career are:

Investigative (Thinkers) — Interested in science and logic. They like to analyze, evaluate and solve problems, and enjoy learning and understanding the causes of events.

Realistic (Doers) — Prefer to work with objects, things, machines, tools, plants or animals. They have mechanical ability, enjoy being outdoors and working with their hands.

Work Values are aspects of work that are satisfying to you. The following work values are generally associated with this career.

Working Conditions — Offer job security and good working conditions.

Recognition — Offer advancement, potential for leadership, and are often considered prestigious.

Achievement — Results oriented, allow use of strongest abilities and provide feeling of accomplishment.

Abilities reflect a person’s aptitude to acquire skills and knowledge. The following abilities are important for success in the career:

- Deductive Reasoning
- Inductive Reasoning
- Problem Sensitivity
- Information Ordering
- Near Vision
- Fluency of Ideas
- Oral Expression
Basic Skills You Need

• Programming
• Systems Analysis
• Systems Evaluation
• Judgment and Decision Making
• Complex Problem Solving
• Critical Thinking
• Operations Analysis
• Speaking
• Active Listening
• Reading Comprehension
• Active Learning

Recommended Levels* for the National Career Readiness Certificate

Applied Math 4
Workplace Documents 4
Graphic Literacy 4

*Using the median skill level.

Where They Work

The South Dakota industries which employ the largest number of software developers, applications are:

• Professional, Scientific and Technical Services
• State Government, Excluding Education and Hospitals
• Credit Intermediation and Related Activities
• Management of Companies and Enterprises

South Dakota Employment & Wages

<table>
<thead>
<tr>
<th>2018 Workers</th>
<th>2028 Workers</th>
<th>Numeric Change</th>
<th>Percent Change</th>
<th>Average Annual Demand for Workers</th>
<th>Annual Median Wage</th>
<th>Annual Average Wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,041</td>
<td>1,300</td>
<td>259</td>
<td>24.9%</td>
<td>108</td>
<td>$74,794</td>
<td>$79,032</td>
</tr>
</tbody>
</table>

Additional References

Labor Market Information Center
www.dlr.sd.gov/lmic

Career OneStop
www.careeronestop.org

O*Net Online
www.onetonline.org

mySkills myFuture
https://www.myskillsmyfuture.org/

Provided By

Labor Market Information Center
South Dakota Dept. of Labor and Regulation
605.626.2314

Visit dlr.sd.gov/hotcareers to obtain the most recent workforce data and trends and more resources, including this document. Also available are explanations of the terms used in this occupational profile.

Auxiliary aids and services are available upon request to individuals with disabilities. U.S. DOL funded. For details, see dlr.sd.gov/lmic/eta_grant.aspx.

Printed on recycled paper.