

South Dakota High Demand & High Wage Career



**Career Cluster: Information Technology** 

# **Software Developers**

Standard Occupational Codes 15-1252

### **What They Do**

Research, design, and develop computer and network software or specialized utility programs. Analyze user needs and develop software solutions, applying principles and techniques of computer science, engineering, and mathematical analysis. Update software or enhance existing software capabilities. May work with computer hardware engineers to integrate hardware and software systems.

### 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.

**Conventional (Organizers)** — Detail oriented and organized. They like to analyze data, keep financial records and do research.

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

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

**Working Conditions** — Offer job security and good working conditions.

**Independence** — Allow employees to work on their own and make decisions.

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

- Written Comprehension
- Near Vision
- Oral Comprehension
- · Deductive Reasoning
- Inductive Reasoning
- Information Ordering
- Problem Sensitivity
- Oral Expression
- Speech Recognition

#### **Basic Skills You Need**

- Programming
- Active Listening
- Complex Problem Solving
- Critical Thinking
- Quality Control Analysis
- Reading Comprehension
- Systems Analysis
- Judgment and Decision Making

## **Education & Training**

The minimum of a bachelor's degree in computer science or similar field is recommended for software developers. Some employers require a master's degree. Demonstrated, strong software development and testing skills are the most important qualification.

# Recommended Levels\* for the National Career Readiness Certificate

Applied Math 4
Workplace Documents 4
Graphic Literacy 4

# Where They Work

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

- Computer Systems Design and Related Services
- Management of Companies and Enterprises
- Credit Intermediation and Related Activities

## South Dakota Employment & Wages

2022 Employment	2032 Employment	Numeric Change	Percent Change	Average Annual Openings	Annual Median Wage	Annual Average Wage
1,920	2,435	515	26.8%	167	\$82,850	\$94,500

### **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/

Auxiliary aids and services are available upon request to individuals with disabilities. U.S. DOL funded. For details, see <a href="mailto:dlr.sd.gov/lmic/eta\_grant.aspx">dlr.sd.gov/lmic/eta\_grant.aspx</a>.

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### **Provided By**

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

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<sup>\*</sup>Using the median skill level.