

# SOFTWARE DEVELOPER

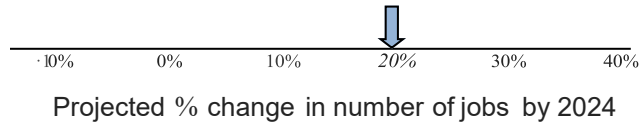
**What do they do?** Develop, create and modify general computer applications software or specialized utility programs. Analyze user needs and develop software solutions. Design software or customize software for client use with the aim of optimizing operational efficiency. May work individually or coordinate database development as part of a team.

**People with these roles and responsibilities are also called:** Application Programmer, Application Integration Engineer, Programmer Analyst, Software Development Engineer, Software Architect, Software Developer, Technical Consultant, Applications Developer, Business System Analyst.

**Some typical job duties include:**

- Design, develop and modify software systems, using scientific analysis and mathematical models to predict and measure outcomes.
- Develop and direct software system testing and validation procedures, programming and documentation.
- Confer with systems analysts, engineers, programmers and others to design system and to obtain information on project limitations and capabilities, performance requirements and interfaces.
- Analyze user needs and software requirements to determine feasibility of design within time and cost constraints.

## Michigan Job Outlook "Faster than average" (+20%)



National Job Outlook through 2024: 26.7%

**National Job Outlook through 2024: 20%**

## Most Important Occupational Skills

**BASIC SKILLS**

Active Listening  
Critical Thinking  
Speaking

**PROBLEM SOLVING SKILLS**

Complex Problem Solving

**SYSTEMS SKILLS**

Judgment/Decision Making  
Systems Analysis  
Systems Evaluation

**SOCIAL SKILLS**

Social Perceptiveness  
Coordination  
Persuasion

**TECHNICAL SKILLS**

Operations Analysis  
Programming

**RESOURCE MANAGEMENT**

Mgmt of Financial Resources  
Time Management  
Mgmt of Personnel

## How much did these jobs pay in 2016?

Average: \$100,080 per year  
(\$48.11 per hour)

## Career Pathway and Educational Requirements

Entry-level (\$50,000-\$80,000)

Managerial (\$60,000-\$100,000)

Executive(\$100,000+)

Software Developer



Senior Software Developer



Chief Technology Officer

**REQUIRED FOR ENTRY**

Bachelor's degree  
Knowledge of specialized technologies

**REQUIRED FOR ADVANCEMENT**

Bachelor's degree  
Knowledge of special technologies  
Multiple years of related work experience

**REQUIRED FOR ADVANCEMENT**

Post-graduate degree preferred  
Many years related work experience

**SOME CERTIFICATIONS THAT CAN HELP YOU ADVANCE:**

Microsoft Certified Technology Specialist -MCTS (Microsoft, available online)

Oracle Certification (Oracle, available online)