

**TUGAS**  
**KEAMANAN JARINGAN**  
**“PROFESI IT”**



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## Summary of the Professions

*Drag the professions' names to their proper definitions*

<b>Network Engineers</b>	implement, maintain, support, develop and design communication networks
<b>Software Developers</b>	responsible for writing programs and provide new software resources based on requirements
<b>Security Analysts</b>	responsible for planning and implementing security measures to protect network and data
<b>Digital Forensic Analysts</b>	recover and examine data from computers and electronic storage to use as evidence in investigations
<b>Security Auditors</b>	responsible for providing assurance that the security plans and controls are implemented correctly
<b>Penetration Testers</b>	responsible for testing overall security of the organisation by finding ways to exploit weaknesses in the network, software, systems or staff
<b>Top Executives</b>	play a big role in the overall security implementation

### Suitable profession and dream profession

Based on the knowledge that I currently have, I feel that of the above professions that best suit me and become my dream profession is a software developer. The following is a further explanation about software developers :

- a. Software developer job
  1. Modify software to fix bugs, adapt new hardware, and to improve performance
  2. Develop and direct software system testing and validation procedures, programming, and documentation
  3. Collaborate with system analysts, programmers, and other workers to design systems and applications
  4. Analyze user requirements and software requirements to determine design feasibility
  5. Design, develop, and modify software systems using scientific analysis and mathematical models
  6. Maintenance of existing systems by monitoring and correcting errors
  7. Meet clients and project managers to design and build new systems
  8. Designing, writing, reading, testing, and fixing code for new software
  9. Documenting the latest updates for each software

b. Required skills

1. Able to master several programming languages required
2. Problem solving ability
3. Cooperation
4. Work is not half measures
5. Detail oriented
6. Understanding of software security

c. Career path

Almost all companies today use software systems. This is what makes a software developer able to work in various industries. The software developer career path starts with becoming a senior software developer, after that you can choose to take a computer architect or engineering manager. After becoming a senior software developer, you can immediately become an engineering manager. You can even become a software architect or director or project manager.

d. Software Developer Certification

Other certifications that will help you get this job include Capability Maturity Model Integration, Microsoft Certified Systems Engineer, and Microsoft SQL Server, as well as:

1. C++ CERTIFICATION, C++ Institute:
  - C Programming Language Certified Association (CLA)
  - C Certified Professional Programmer (CLP)
  - Certified Senior Programmer (CLS)
  - C++ Certified Associate Programmer (CPA)
  - C++ Certified Professional Programmer (CPP)
  - C++ Certified Senior Programmer (CPS)
2. IEEE PROFESSIONAL SOFTWARE DEVELOPER CERTIFICATION (PSD)
3. IEEE PROFESSIONAL SOFTWARE ENGINEERING PROCESS MASTER CERTIFICATION (PSEPM)
4. IEEE SOFTWARE ENGINEERING MASTER CERTIFICATION (PSEM)
5. MICROSOFT CERTIFIED SOLUTIONS DEVELOPER (MCSD)