



ugr

Universidad
de Granada

PGPI

Práctica 6

Selección de personal

Autor

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Escuela Técnica Superior de Ingenierías Informática y
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1- position offered

Our company is a company destined to carry out projects in a healthy field. Our main objective is to improve the quality and health services through new technologies.

We are currently developing a project in Granada to implementation and exploitation of a software program integrated into a patient management system of a hospital that will enable the complete management of the IT Restructuring and Improvement Plan of medical management.

We are looking for an Information Security Engineer

Description

- Maintain and administer applications, service, and devices that aid in the work of Information Security.
- Install, configure and upgrade security software and hardware.
- Determines security violations and inefficiencies by organizing and conducting tests and “ethical hacks” of the existing security architecture.
- Investigate and document Security Incidents.
- Support vulnerability management process (identifying new vulnerabilities, research and analysis and response).
- Automating and collecting security metrics.
- Test security solutions using industry standard analysis criteria.
- Respond to information security issues.

Requirements

- Excellent command of English and Spanish, other language of advantage
- years of IT experience, with more years’ experience in information security.
- Bachelor degree in Electrical/Electronic/Communication/Computer Engineering, Computer Science, information technology, or related fields.
- Has worked with Info Security standards.
- Knowledge of DLP solutions and its applications in an enterprise. Experience with vulnerability scanning and vulnerability management.
- Understanding of web filtering solutions and its applications. Knowledge in administering and securing Microsoft and Linux systems.
- Good understanding and fare experience of various DBMS platforms, e.g. MySQL/MSSQL.
- Good understanding of network and web related protocols (e.g., TCP/IP, UDP, IPSEC, HTTP, HTTPS, routing protocols, etc.)
- Good understanding of sub-netting, DNS, encryption technologies and standards, VPNs, VLANs, VoIP and other network concepts.

what's awaiting you?

- 30K annual gross fixed salary Opportunity to develop your talent with a goal-oriented team.
- You will have a mentor within your team that will guide and teach you on the job
- A full-time indefinite contract
- Trainings and conferences paid when applicable.
- A modern technology stacks
- An open, dynamic, and flexible corporate culture. Flexible working hours within a given frame and home office
- Participation in company events in our international offices
- Perks such as flexible benefits plan, company paid Private Health Insurance, drinks and snacks in the kitchen area, and more.

2- Selection criteria

In order to know the skills of each of the candidates, we proceed to design and develop a form based on the selection criteria specified in the previous section.

| Requirement | level | Requirement Weight |
|--|---|--------------------|
| - Excellent command of English and Spanish, other language of advantage | Language | 10% |
| | level | |
| | | |
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| | | |
| - years of IT experience, with more years' experience in information security. | <input type="checkbox"/> Less than 1 years <input type="checkbox"/> Less than 2 years <input type="checkbox"/> Less than 5 years <input type="checkbox"/> Greater than 3 years | 10% |
| worked with Info Security standards | <input type="checkbox"/> Less than 1 years <input type="checkbox"/> Less than 2 years <input type="checkbox"/> Less than 5 years <input type="checkbox"/> Greater than 3 years | 15% |
| Knowledge of networks and network services | <input type="checkbox"/> None <input type="checkbox"/> Low (I know network protocols and basic configuration) | 15% |

| | <div><input type="checkbox"/> Medium (I know how to connect devices via IP network protocol efficiently)</div> <div><input type="checkbox"/> High (I know network protocols and how to organize an efficient and secure network)</div> | | | | | | | | | | | |
|--------------------------------------|--|--------------------|-------------------|--|--|--|--|--|--|--|--|-----|
| Linux system domain | <div><input type="checkbox"/> None</div> <div><input type="checkbox"/> Low (Basic Commands)</div> <div><input type="checkbox"/> Medium (Administration of services, users ...)</div> <div><input type="checkbox"/> High (Service settings domain, server management ...)</div> | 5% | | | | | | | | | | |
| Knowledge of DLP solutions | <div><input type="checkbox"/> None</div> <div><input type="checkbox"/> Low</div> <div><input type="checkbox"/> Medium</div> <div><input type="checkbox"/> High</div> | 15% | | | | | | | | | | |
| experience of various DBMS platforms | <table><tr><th>DBMS platform name</th><th>Experiences years</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> | DBMS platform name | Experiences years | | | | | | | | | 10% |
| DBMS platform name | Experiences years | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
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| Education | <table><tr><th>Certificate Title</th><th>Degree</th></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> | Certificate Title | Degree | | | | | | | | | 20% |
| Certificate Title | Degree | | | | | | | | | | | |
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3- Interview

The interview consists a set of questions, the first part of the questions will be a series of questions related to his personality and way of thinking these a series of questions will be asked and the degree of satisfaction of the evaluator will be marked to the response and impression obtained from the candidate. The evaluator will put values between 0 and 10 to each question, and there is a Weight for each question which dependent on the importance of the question.

The questions to be asked are the following (the main ones, then some more may be asked depending on the candidate's answers).

| Question | Value | Question Weight |
|---|--|-----------------|
| Why you want work in this field? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 15% |
| where did you work before?and why did you left them(if he had a job before)? What have you learned from your previous work(if he had a job before)? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 20% |
| What work experience do you have? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 | 30% |

| | | |
|--|--|-----|
| | <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | |
| Why do you want work with us? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 5% |
| Are you satisfied with the salary? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 10% |
| if you get a new job with salary higher than what we will pay to you, will you stay with us? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 5% |
| why you like information technology field? And what do you like more? | <input type="radio"/> 0 <input type="radio"/> 1 | 5% |

| | | |
|--|--|-----|
| | <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | |
| do you have a problem to travel for working for long time? | <input type="radio"/> 0 <input type="radio"/> 1 <input type="radio"/> 2 <input type="radio"/> 3 <input type="radio"/> 4 <input type="radio"/> 5 <input type="radio"/> 6 <input type="radio"/> 7 <input type="radio"/> 8 <input type="radio"/> 9 <input type="radio"/> 10 | 10% |

4- Simulation and evaluation of candidates

a simulation will be carried out in which 3 candidates are presented and they carry out the selection process,

| Requirement | Candidat1 | Candidat1 | Candidat1 | Degree | Final degree |
|--|--|---|---|---|-------------------------------------|
| Excellent command of English and Spanish, other language of advantage | English, advanced Spanish, advanced | English Low Spanish Advanced | English Low Spanish Advanced Arabic Advanced | Cand1=9*0.1 Cand2=7*0.1 Cand3=8*0.1 | Cand1=0.9 Cand2=0.7 Cand3=0.8 |
| years of IT experience, with more years' experience in information security. | Less than 2 years | Less than 5 years | Less than 2 years | Cand1=6*0.1 Cand2=9*0.1 Cand3=6*0.1 | Cand1=0.6 Cand2=0.9 Cand3=0.6 |
| worked with Info Security standards | Less than 2 years | Less than 2 years | Less than 2 years | Cand1=6*0.15 Cand2=6*0.15 | Cand1=0.9 Cand2=0.9 Cand3=0.9 |

| | | | | | |
|--|---|----------------------------|--------------------------------|---|-------------------------------------|
| | | | | Cand3=6*0.15 | |
| Knowledge of networks and network services | None | High | Low | Cand1=0*0.15 Cand2=10*0.15 Cand3=3*0.15 | Cand1=0 Cand2=1.5 Cand3=0.45 |
| Linux system domain | High | High | High | Cand1=10*0.05 Cand2=10*0.05 Cand3=10*0.05 | Cand1=0.5 Cand2=0.5 Cand3=0.5 |
| Knowledge of DLP solutions | None | Medium | Low | Cand1=0*0.15 Cand2=6*0.15 Cand3=3*0.15 | Cand1=0 Cand2=0.9 Cand3=0.45 |
| experience of various DBMS platforms | SQL server High level MongoDB High level | SQL server High level | SQL server High Level | Cand1=9*0.1 Cand2=7*0.1 Cand3=7*0.1 | Cand1=0.9 Cand2=0.7 Cand3=0.7 |
| Education | Information technology engineering Master | Computer science BA | Computer science Master | Cand1=9*0.2 Cand2=7*0.2 Cand3=9*0.2 | Cand1=1.8 Cand2=1.4 Cand3=1.8 |
| | | | | | Cand1=5.6 Cand2=7.5 Cand3=6.2 |

| Question | Candidat1 | Candidat2 | Candidat3 |
|---|-------------|-------------|-------------|
| Why you want work in this field? | 9*0.15=1.35 | 10*0.15=1.5 | 9*0.15=1.35 |
| where did you work before?and why did you left them(if he had a job before)? What have you learned from your previous work(if he had a job before)? | 8*0.2=1.6 | 8*0.2=1.6 | 6*0.2=1.2 |
| What work experience do you have? | 9*0.3=2.7 | 9*0.3=2.7 | 8*0.3=2.4 |
| Why do you want work with us? | 6*0.05=0.3 | 9*0.05=0.45 | 8*0.05=0.4 |
| Are you satisfied with the salary? | 10*0.1=1 | 10*0.1=1 | 10*0.1=1 |

| | | | |
|--|-----------------------|------------------------|------------------------|
| if you get a new job with salary higher than what we will pay to you, will you stay with us? | $8 \times 0.05 = 0.4$ | $9 \times 0.05 = 0.45$ | $9 \times 0.05 = 0.45$ |
| why you like information technology field? And what do you like more? | $8 \times 0.05 = 0.4$ | $8 \times 0.05 = 0.4$ | $9 \times 0.05 = 0.45$ |
| do you have a problem to travel for working for long time? | $9 \times 0.1 = 0.9$ | $9 \times 0.1 = 0.9$ | $9 \times 0.1 = 0.9$ |
| Final degree | 8.65 | 9 | 8.15 |

After obtaining the results of the candidates, we proceed to evaluate them based on the following:

- Knowledge and experience form: 70%
- Interview: 30%

Finally, we can calculate the final result by:

| Evaluations | Candidat1 | Candidat2 | Candidat3 |
|-------------------------------|---------------------------|-------------------------|---------------------------|
| Knowledge and experience form | $5.6 \times 0.7 = 3.92$ | $7.5 \times 0.7 = 5.25$ | $6.2 \times 0.7 = 4.34$ |
| Interview | $8.65 \times 0.3 = 2.595$ | $9 \times 0.3 = 2.7$ | $8.15 \times 0.3 = 2.445$ |
| Final degree | 6.525 | 7.95 | 6.785 |