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Universidad
de Granada

PGPI

Práctica 6

Selección de personal

Autor

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Y

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Escuela Técnica Superior de Ingenierías Informática y
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Granada, Noviembre de 2019

1- Position offered

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

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

We are looking for an Information Security Engineer

Description

- Maintain and administer applications, services, and devices that aid in the work of Information Security.
- Install, configure and upgrade security software and hardware.
- Determine 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
- 5 years of IT experience, with at least 3 years’ experience in information security.
- Bachelor’s 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 use of English and Spanish, other language of advantage	Language	10%
	Level	
- 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											
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											

3- Interview

The interview consists on a set of questions, the first part of the questions will be related to their personality and their way of thinking, these series of questions will be asked and the degree of satisfaction of the evaluator will be marked depending on the response and impression obtained from the candidate. The evaluator will evaluate between 0 and 10 each question, and there will be a "Weight" for each question, which will 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 do you want to 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? Why did you leave (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 to 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 higher salary than what we offer 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 do you like the information technology field? What do you like the most about it?	<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 with long work-related trips?	<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 carry out the selection process.

Requirement	Candidate 1	Candidate 2	Candidate 3	Degree	Final degree
Excellent use 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	Candidate 1	Candidate 2	Candidate 3
Why do you want to work in this field?	9*0.15=1.35	10*0.15=1.5	9*0.15=1.35
Where did you work before? Why did you leave (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 to 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 higher salary than what we offer 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 do you like the information technology field? What do you like the most about it?	$8 \times 0.05 = 0.4$	$8 \times 0.05 = 0.4$	$9 \times 0.05 = 0.45$
Do you have a problem with long work-related trips?	$9 \times 0.1 = 0.9$	$9 \times 0.1 = 0.9$	$9 \times 0.1 = 0.9$
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 result by:

Evaluations	Candidate 1	Candidate 2	Candidate 3
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