

TOEFL Listening Practice Test 19

SET 1

Lecturer: Hello class, so today we're going to be looking at facial recognition, and to the different sorts of technology that go into facial recognition. Now before we start, can any of you tell me where we can see facial recognition in action? yes, you at the back?

Student: In the TV show Las Vegas?

Lecturer: Yes, well you're right. In this popular TV show, the security team pull images of the individuals from their surveillance system and run the image through a data base to identify the person. In that way, all the card counters and blacklisted gamblers can be escorted from the poker tables. It looks easy on TV, but in the real world, facial recognition is a tricky business. So let's start with the more traditional methods of facial recognition. Every face has peaks and valleys, and these can be translated into what is termed as nodal points. Each face has about 80 of these, and they include distance between the eyes, the length of the jaw, the width of the nose, things like that. These measurements can be used to create a numerical code, and this is called a faceprint. This system is good, because it can compare two dimensional images, such as photographs. The problem is that the images have to be controlled. The person has to be staring straight at the camera, there must be no variance in facial expression or lighting, because any variance in these parameters reduces the effectiveness of the system. So they had to come up with another way.

So the new way of recognising faces is by using a 3D model. It has better accuracy, allegedly. 3D imagery detects distinctive features in the face, such as the curves of the eyes, nose and chin – features which do not change over time. These are measured at the sub-millimetre level. Interestingly, a 3D image can be taken not only from a live scan but also from a 2D photograph. And another good thing about the 3D system is that it can recognise a person from a range of angles, the person doesn't have to be directly facing the camera, as in 2D technology. Once again, the system gives each individual a unique code – a set of numbers that represents the face.

It's easy to match a 3D image to another 3D image, if you already have a 3D image in your database. It's less easy to match 3D images to 2D images. But what they can do is pull certain measurements from the 3D image, such as size of the eye and so forth, and use this to convert the 3D image into a 2D image, and this image can be more easily compared to the 2D images in the database.

But it's not just the measurements which can be used to recognise faces. There's also a new development called Skin Biometrics. This uses the uniqueness of skin texture to get its results. The process takes a picture of a patch of skin, and the system will then identify any pores, lines, moles, blemishes and other features of skin texture. This method can be used to identify identical twins, something that cannot be done with the 3D technology. Its other advantages over 3D imagery are that it's insensitive to changes in expression, blinking, smiling and so forth, and can compensate for changes in facial features – such as the growth of a beard, or wearing glasses. It's not perfect, though, as it is sensitive to lighting conditions and poor camera resolution, and if there is glare from the sun.

So, now we've covered the main types of facial recognition, we'll move on to its uses. Now, has anybody here ...

Q1. Where does the TV show 'Las Vegas' take place?

A In a shopping mall

- B In a police department**
- C In a casino**
- D In a crime lab**

Q2. What is a faceprint?

- A a code which identifies a face**
- B distinctive curves in the face**
- C a 2D image of the face**
- D the number of nodal points on the face**

Q3. Identify TWO problems with 2D facial recognition from the list below.

- A It is not effective if a picture is dark.**
- B The person in the photograph must face the camera.**
- C Facial curves change over time.**
- D Nodal points cannot be measured**

Q4. What is the problem with the 3D technology?

- A It can only be used when the individual is directly facing the camera**
- B The image might change over time**
- C It's impossible to match a 3D image to a 2D image**
- D It cannot distinguish between identical twins**

Q5. Which TWO elements below can be measured by Skin Biometric technology?

- A the curve of someone's chin**
- B the texture someone's skin**
- C the existence of lines on the face**
- D the distance between the eyes**

6. Which of these faces will the Skin Biometric System be UNABLE to identify?





SET 2

Amy: Hey, Jim, do you mind if I ask you about something?

Jim: Sure, Amy, what's up?

Amy: I'm thinking about leaving the history course.

Jim: You're not going to drop out of college are you?

Amy: No, I mean, I don't think so, but I'm considering transferring to another major. I'm just not sure if history is the right thing.

Jim: Why not? It's not like you've been doing badly in your assignments or anything is it? I thought your grades were okay.

Amy: Yeah, it's not that.

Jim: Don't you like the course?

Amy: Yeah, of course I do. It's just that, I'm worried that I won't have learnt anything useful by the end of it. It's not like there are many jobs to be had as a historian, are there? So, when I get to the end of the course, I'm only going to have to train as something else in order to get a decent job. Well, as far as I see it, I might as well be doing that training now, instead of learning about the... Romans.

Jim: But don't you find it fascinating? I do. There's nothing in the world I'd rather be learning about!

Amy: Yeah, of course. I do, Jim. The course is great and the professors are all really enthused, and that's really inspiring. But I just can't see the point of it all. It's a lot of hard work, after all. And I'm not sure I'm going to come away with anything useful at the end of it.

Jim: Well, what are you thinking of doing instead?

Amy: Maybe something like business or management.

Jim: I can't think of anything duller.

Amy: Yeah, I know it's not riveting, but that's not the point.

Jim: Well, it is, actually. The way I see it, college isn't for making you employable. It's for really getting to grips with something you find fascinating, meeting like-minded people and debating the world's issues. It's a golden opportunity to do the things you love for four years without being burdened by the outside world. The employability aspect is just an added bonus.

Amy: Mmm... So what do you intend to do after?

Jim: I'm thinking of training as a teacher. That way I can use what I've learnt.

Amy: You'd be really good at that. You're really keen and you really get people excited about what they're doing. I couldn't do that though. It's not really my thing.

Jim: Yeah, but there are a lot of other employers out there who really appreciate the skills that we history geeks learn as part of our course.

Amy: Stuff like what?

Jim: Like sourcing information, gleaning what's relevant and what's not, critical analysis, and writing skills of course. And all those presentations we do. All those things are transferable to other jobs. That sort of things makes them really enthusiastic.

Amy: It's a bit of a waste, though, if you never use what you've learnt.

Jim: What I think you should do is go to the careers office and talk to them. They'll be able to tell you what sort of careers you can get with a background in history. They should be able to convince you that it's worthwhile to stay on.

Amy: I talked to Professor Jacques already.

Jim: Oh Professor Jacques doesn't know anything about that sort of thing. I doubt if she'd ever left the college since she entered it and that must have been fifty years ago. See someone in the careers office. They'll know what they're talking about. Hopefully they'll give you some suggestions of things you can do with a history degree and convince you that business isn't the way to go.

Amy: Okay, I'll try that.

Jim: Great.

Q1. What is the main point of the discussion?

- A. Job prospects for students doing their course**
- B. Grades for a recent assignment**
- C. The advantages and disadvantages of going to college**
- D. The quality of the teaching on their course**

Q2. Why is the woman concerned?

- A. She feels she is not learning anything useful.**
- B. She has been receiving poor grades.**
- C. She is not enjoying her course.**
- D. She is finding the course very difficult.**

Q3. What does the man appreciate most about studying at university?

- A. Studying a subject in depth**
- B. Getting involved in discussions**
- C. Meeting people with diverse interests**
- D. Teaching others about what he has learnt**

Q4. The man says that employers will appreciate the woman's ____.

- A. transferable skills**
- B. ability to train others**
- C. enthusiasm**
- D. knowledge of history**

Q5. What is implied about Professor Jacques?

- A. She has never worked outside the university.**
- B. She is a good person to ask about careers.**
- C. She is more approachable than the other professors.**

D. **She teaches on both the history and the business course.**