

Smart cards are now increasingly popular in cellular systems, because these are used in an inexpensive way to enable e-commerce applications, additional security and roaming functions, without altering the basic design of terminals. Wireless internet and mobile e-commerce will boom soon, as network operators aggressively pursue the merits of integrating security and transaction applications on the WAP (Wireless Application Protocol) platform.

To sum up, the evolution and technology development of smart sensors for various applications in different fields have been discussed. Fabrication aspects of smart sensors have also been discussed. The latest trends including biochips have also been presented. Measurements and instrumentation systems will be developed by using smart sensor in future.

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VIVID PECULIARITIES OF AMERICAN AND BRITISH PRONUNCIATION

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In phonetics and phonology, articulation is the movement of the tongue, lips, jaw, and other speech organs (the articulators) in order to make speech sounds. Sound is produced simply by expelling air from the lungs. However, to vary the sound quality in a way that can be useful for speaking, two speech organs normally need to come close to each other to contact each other, so as to create an obstruction that shapes the air in a particular fashion. The point of maximum obstruction is known as the place of articulation, and the way in which the obstruction is formed and released is known as the manner of articulation. For example, when making a p sound, the two lips come together tightly, blocking the air for a little while and causing a buildup of air pressure. The lips are then released suddenly, leading to a burst of sound. The place of articulation of this sound is therefore called bilabial, and the manner is called stop (also known as a plosive).

Pronunciation Differences of Vowels:

Pronunciation of the Sound [ɑ] in American English. In American English, there are many words that have sound/phoneme [ɑ] as in father vowel. The corners of the lips are completely relaxed, and the jaw drops a bit more than In British English. The sound [ɑ] has a good bit of jaw drop and totally relaxed lips.

Pronunciation of the Sound [ɒ] in British English. In British English, however, there is a different sound [ɒ] . In words like dog, pot, is pronounced with rounded lips and the tongue back in the mouth. There is more lip rounding and less jaw drop.

e.g. Pronunciation of the Sound [ɑ] in American English *hot* [hat], *honest* [ɑnist], *mom* [mɑm], *top* [tɑp].

e.g. Pronunciation of the Sound [ɒ] in British English *hot* [hɒt], *honest* [ɒnist], *mom* [mɒm], *top* [tɒp].

See the differences of Pronunciation in sentences:

- American English : h[ɑ]t or iced c[ɑ]ffee?

- British English: h[ɒ]t or iced c[ɒ]ffee?

Pronunciation of the Sound [æ] in American English. In A.E. when this vowel is followed by a nasal consonant, it is no longer a pure vowel. We have [æ] sound. The tongue relaxes down in the back before the tip raises in word can, and before the lips close in word ham.

Pronunciation of the Sound [ɑ:] in British English. In B.E the sound [æ] is having a much wider open mouth position.

e.g. Pronunciation of the Sound [æ] in American English *can* [kæn], *ham* [hæm], *thanks* [θæŋks].

e.g. Pronunciation of the Sound [æ] in British English *can* [kæ:n], *ham* [hæ:m], *thanks* [[θæ:ŋks].

Pronunciation of the Sound [ɜ:(r)] in American English. The next sound is [ɜ:(r)].

In A.E. although variable, the tongue is slightly above the neutral position with some bunching in the palatal region. We hear [ɜ:] always with the sound [r].

Pronunciation of the Sound [ɜ:] in British English. In B.E we hear [ɜ:] without the sound [r] . In B.E the sound [r] is not included

e.g. Pronunciation of the Sound [ɜ:(r)] in American English *first* [fɜ:(r)st], *worst* [wɜ:(r)st], *girl* [gɜ:(r)l].

e.g. Pronunciation of the Sound [ɜ:] in British English *first* [fɜ:st], *worst* [wɜ: st], *girl* [gɜ:l].

Pronunciation Differences of Consonants:

Pronunciation of the Sound [t] in British English. In B.E the tip of your tongue pressed against the top of your mouth right behind the front tooth.

Then slightly push air separating your tongue and upper mouth. Every time the letters D and T are spoken, the tip of your tongue should be directed the upper part of your mouth.

Pronunciation of the Sound [t] in American English. In A.E the tend to drop the [t] in the final position. When the sound [t] is in the middle position in a word, it changes to a soft (d).

e.g. Pronunciation of the Sound [t] in British English *what* [wɒt], *cut* [kʌt], *saturday* [sætədeɪ], *waiter* [weɪtə], *matter* [mætə].

e.g. Pronunciation of the Sound [t] in American English *what* [wə], *cut* [kʌ], *saturday* [sæ(d)ədeɪ], *waiter* [weɪ (d)ə], *matter* [mæ(d)ə].

Pronunciation of the Sound [r] in British English. In B.E Open your mouth slightly. Curl the tip of your tongue back without touching the top of your mouth.

The tip of the tongue should not touch the gum ridge or your teeth when pronouncing the sound [r]. When the sound [r] is in the middle position in B.E people tend drop it. And also drop the sound [r] at the end of the word.

Pronunciation of the Sound [r] in American English. In A.E the sound [r] should not be dropped.

e.g. Pronunciation of the Sound [r] in British English *birth* [bɜ:θ], *turn* [tɜ:n], *learn* [lɜ:n], *work* [wɜ:k], *clever* [klevə], *director* [daɪrektə];

e.g. Pronunciation of the Sound [r] in American English *birth* [bɜ:rθ], *turn* [tɜ:rn], *learn* [lɜ:rn], *work* [wɜ:rk], *clever* [klevər], *director* [daɪrektər].

Pronunciation of common words in American and British English.

e.g. Pronunciation of common words in British English *new* [nju:], *adult* [ædʌlt], *brochure* ['brɔʃjə], *garage* ['gærɪdʒ], *address* [ə'dres], *laboratory* [lə'brɒrətəri], *rout* [rɔ:t];

e.g. Pronunciation of common words in American English *new* [nu:], *adult* [ædʌlt], *brochure* ['brɔʃjʊr], *garage* ['gærɑ:ʒ], *address* [æ'dres], *laboratory* [læbrətəri], *rout* [raʊt].

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