Current state and prospects of development of training for computer science teachers in Uzbekistan

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Contents

• About Uzbekistan
• Education system of Uzbekistan
• Current state and prospects of development of training for computer science teachers in Uzbekistan
The Republic of Uzbekistan declared Independence at September 1, 1991. Uzbekistan is divided into twelve provinces, one autonomous republic Karakalpakstan. Uzbekistan has an area of 447,400 square kilometers. Capital: Tashkent. Population: 29 million people (after Russian, Ukraine)
Islam Karimov
President of Uzbekistan.

Emblem of Uzbekistan

Flag
UZBEKISTAN AND GREAT SILK ROAD
Amir Temur (Tamerlane)

Tamerlane was a conqueror, military and political leader Turkish-Mongol, the last great nomadic conquerors of Central Asia. Is given by born in Kesh, Central Asia, in 1336, possibly in Samarkand. Otrar died on the way to conquer China, the sunset in 1405. This noble Muslim Turkish and Mongol conquered vast tracts of Eurasia in little more than two decades. Between 1382 and 1405 their big armies crossed from Delhi to Moscow, from the Tian Shan Mountains of Central Asia to the Taurus Mountains of Anatolia, conquered and reconquered, destroying cities and forgiving others. His fame spread throughout Europe, where for centuries it was a romantic figure and terror, while for those involved more directly in its path memory, seven centuries later, is still fresh, either as a destroyer of cities in the Middle East or the last great representative of nomadic power.
Ulugbeg (1393/1394 - October 27, 1449) was, during the rule of Tamerlane, ruler (1447-1449) and Sultan. Also stressed as an astronomer and mathematician.

During his life took a great interest in astronomy and in 1428 built a large observatory called Zij Gurjani very similar to the operation of Tycho Brahe he called Uraniborg. Instruments installed in the observatory large to make it possible to make precision measurements in this way had Fakhri sextant with a radius of about 36 meters and a visual separation of 180 "(arc seconds). sundials built immense.
Avicenna was a physician, Persian philosopher and scientist. He wrote nearly four hundred and fifty books on various subjects, mainly in philosophy and medicine.

His most famous being The Book of Healing and The Canon of Medicine also known as Avicenna's Canon. His disciples called him Raïs el-Cheikh, ie "prince of the wise ", or the greatest doctors, the Teacher, or end the third Master (after Aristotle and Al-Farabi).

He was born on 7 August 980 Afshan (Khorasan province, now in Uzbekistan), near Bukhara. His parents were Muslims.
GM-Uzbekistan a company producing vehicles with a capacity of 280 thousand in the year.
SAMKOCHAUTO is another company that makes buses marked "ISUZU" and trucks marked "MAN"
A company "TAPOICH" which produce branded aircraft IL-110, are produced every year and arrange other 5 planes.
Interesting information about Uzbekistan

Reserves of gold Uzbekistan ranks fourth in the world after South Africa, USA and Russia. And in terms of gold - the second place among CIS countries after Russia.

Uranium reserves of Uzbekistan is ranked seventh in the world after Australia, Kazakhstan, Russia, Canada, South Africa and Ukraine, and third place in the world on its exports after Kazakhstan and Australia.

Reserves and production of copper and tungsten, Uzbekistan is among the top ten countries in the world.

Natural gas production of Uzbekistan is among the top ten gas-producing countries in the world and ranks third among the CIS, after Russia and Turkmenistan. Uzbekistan's natural gas industry is concentrated mainly in the areas Gazley and Karshi. In 2010 in Uzbekistan, the discovery of new natural gas field near Kosbulakskogo Trough and the North Ustyurt region (western Aral Sea), as well as prospective area Ernaza in Bukhara-Khiva oil and gas region.
Economy

Uzbekistan has some deposits
Gas from 66.2 trillion cubic feet

Gas-oil 600 million tons
Produced 3.4 million tons each year. Uzbekistan is among the five leading producers of cotton. Five countries: China, USA, India, Pakistan and Uzbekistan - together produce 65% of its total amount. Export of cotton fiber Uzbekistan ranks third after the U.S. and India. Over 75% of produced cotton is shipped for export.
Sports in Uzbekistan

Ruslan Chagaev - has been boxing World Champion, by the World Association.
Sports in Uzbekistan

Iroda TULAGANOV - tennis champion at 18 years of the tournament UMLDON

Rustam Qosimjonov - 2004 World Champion Chess.
Tourism is developing rapidly in Uzbekistan for its culture and become a new destination. Tashkent - capital is a business center.
Tashkent — capital of Uzbekistan

Tashkent Metro is a marvel.
Tashkent – capital of Uzbekistán

Tashkent - a modern and cultural city.
Tourism in Uzbekistan

Cities accepted as a World Heritage Site by UNESCO.

Ichon Kala (Khiva)

Historic Centre of Bukhara

Samarkand - Crossroads of Cultures
Ichan Kala is the inner city to the city of Khiva, Uzbekistan, protected by high brick walls, a dozen meters, the ancient oasis that was the last stage of caravans before crossing the desert to Iran.
Bukhara is the fifth largest city in Uzbekistan. Bukhara is the capital of the province of Bukhara. Historically, it was also coming to know Buhe / Puhe in China during the Tang dynasty.

Bukhara has been one of the main centers of Iranian civilization throughout history. Its architecture and archaeological sites are part of the pillars of history and Persian art. The region of Bukhara was for a long period of the Persian Empire. The origin of its inhabitants from the period of Aryan immigration into the region.
Tourism in Uzbekistan

Samarkand - Crossroads of Cultures

Samarkand is the second largest city in Uzbekistan. UNESCO declared this city of 2,700 years ago as a World Heritage Humanity in 2001 and was registered as Samarkand - Crossroads of Cultures. Samarkand is one of the oldest cities in the world still inhabited. Given its location, Samarkand flourished due to being located on the Silk Road between China and Europe. He became one of the largest cities in Central Asia.
SAMARQAND
Registan
Tourism in Uzbekistan
Uzbekistan hosts many music festivals as "Sharq taronalari", "Asrlar sadosi."
Art and music in Uzbekistan
Art and music in Uzbekistan

Working on a pottery wheel and metal (brass, copper ...)....
Uzbekistan Airways International routes map.
Ecologic problem Uzbekistan
Education system of Uzbekistan
preschool education; secondary education

specialized secondary and vocational education; higher education; postgraduate education;

skills upgrading and retraining; school education.
Kindergarten 6135

Schools 9727

Colleges and lyceums 1507
(1372 colleges and 135 lyceums)

University and institutes 59

Scientific institutes 53

School education - 214
system of general secondary education

Primary (1-4 school classes)

secondary (5-9 school classes)
System of secondary specialized vocational education

Compulsory secondary specialized vocational education (AFS) with a three-year course is an independent kind of continuing education. It is carried out in accordance with the laws of the Republic of Uzbekistan "On Education" and "On the National Program for training."
System of secondary specialized vocational education

secondary vocational education (academic high schools)

Vocational education (professional colleges)
Academic Lyceum

Academic Lyceum - specialized secondary and vocational educational institution for a period of training for three years, ensuring, in accordance with state educational standards of intensive intellectual development, depth, profile, differentiated, professionally oriented education with the capacities and interests of students. In the academic high schools students to voluntarily choose a field of study: humanities, natural sciences, agricultural and other
Professional College

Professional College - specialized secondary and vocational educational institution with the apprenticeship of three years. In accordance with state educational standards College provides specialized secondary and vocational education with in-depth development of professional inclinations. College graduates acquire one or more specialties in selected areas of training (profession).
Higher education has two stages: bachelors and masters degrees.

- Undergraduate - a basic higher education that includes basic and applied knowledge in the direction of training courses with a duration of at least four years. Upon completion of bachelor's program graduates on the basis of state certification is awarded the degree "Bachelor" in the direction of training and be issued a state diploma.

- Graduate - Higher education in basic and applied knowledge on a particular specialty (training direction) with the duration of study for at least two years, which can be accessed on a competitive basis only on the basis of an undergraduate degree.
Institutions of higher education

Higher education institutions are legal entities. In the Republic, the following types of higher educational institutions:

- University - provides educational programs of higher and postgraduate education on a wide range of areas of knowledge and training areas;
- Academy - provides educational programs of higher and postgraduate education on a specific area of expertise and areas of training;
- Institute - provides higher education programs and, as a rule, post-graduate education in specific areas of training within a single area of expertise.
Graduate education

Postgraduate studies can be obtained at universities and research institutions (aspirantura, adyunktura, , doctorantura, researcher). Stage (aspirant, doctoral) graduate education completed thesis. According to the results of the final state certification, awarded degrees, respectively, the Ph.D. and Doctor of Science, with the issuance of state diplomas.
Current state and prospects of development of training for computer science teachers in Uzbekistan
Textbooks for school
Problems and Solutions

Teacher Training

- Technological knowledge "age" every 2-3 years, with a steady positive dynamics of this process.

Problems

- The concept of blended learning suggests that in contemporary conditions the student must optimally and in various combinations to use all the opportunities provided by both classical training, and application of remote technology.

Solutions

- One of the solutions to the current problem is to use mixed (combined) training.

Teacher training
Standards for bachelor's and comparison of curricula developed countries

- Discrete Structures (дискретная математика),
- Probability and Statistics (теория вероятности и статистика),
- Electronics (электроника),
- Circuits and Signals (схемотехника),
- Computer Engineering (вычислительная техника),
- Digital Signal Processing (сигнальные процессоры),
- Algorithms (алгоритмы),
- Software Engineering (технологии программирования),
- Operating Systems (операционные системы),
- Computer Architecture and Organization (организация ЭВМ и вычислительных систем),
- Computer Systems Engineering (проектирование ЭВМ и вычислительных систем),
- Database Systems (базы данных),
- Digital Logic (логическое проектирование и моделирование),
- Embedded Systems (встроенные системы),
- Computer Networks (компьютерные сети),
- VLSI Design and Fabrication (проектирование и производство СБИС),
- Human - Computer Interaction (человеко-машинное взаимодействие),
- Social and Professional questions (социальные и профессиональные вопросы).
Standards for bachelor‘s in Uzbekistan

• 1 block. Humanitarian and socially economic subjects: history, law, philosophy, Russian, a foreign language, ... 14 subjects
Standards for bachelor’s in Uzbekistan

2 block. Mathematical and naturally scientific subjects.

Higher mathematics, computer science, information technology, discrete mathematics, physics, ecology - 6 subjects
3 block. General professional subjects - 21 subjects
1) Computer graphics and design
2) Technology of programming
3) Structure of the data and algorithms
4) Circuitry  5) Information bases of computing systems
6) System software   7) Banks a database
8) Mathematical modeling
9) Operating systems and office programs
10) Bases the management theory
11) Information safety
12) intellectual systems
13) Bases of the system analysis
14) General psychology
15) Pedagogica
16) Technique professional educations
17) Bases pedagogical skill
4 block. Subjects on a speciality - 5 subjects

1) objective focused programming languages
2) Computer systems and networks
3) Information systems and technologies
4) Multimedia systems and technologies
5) technology Internet
5 block. Military preparation

6 block. Selective subjects 8 subjects

1) Electronic pedagogics
2) Bases of distance learning
3) Technique of teaching of special subjects
4) Pedagogical technologies
Methodological framework to improve training of future teachers of informatics

- **Integrated education** - a modern principle of learning that affects the selection and structure of educational material of a number of items increases the systematic knowledge of students, stimulates learning methods, focuses on the use of complex forms of training, ensuring the unity of the educational process.
Methodological framework to improve training of future teachers of informatics

- Informatics
- Languages
  - English
  - Russian
- Higher mathematics
- Discrete mathematics
Methodological framework to improve training of future teachers of informatics

**Blended learning model** - a model of distributed information and educational resources in a full-time training with elements of asynchronous and synchronous distance learning.
Methodological framework to improve training of future teachers of informatics

- Macromedia Flash
- HTML, CSS, Javascript
- Power CHM
- Snagit
- Active tutor
Thanks for attention