Vinton Cerf on the Future of Remote Medicine

The University of Central Asia, in collaboration with the Aga Khan University (AKU) and CxO Global Forum, organized a presentation by the eminent Dr Vinton G. Cerf, Vice President and Chief Internet Evangelist at Google, on the Internet of Things (IoT) and Remote Medicine.

Dr Cerf is considered the “Father of the Internet”, having co-designed its architecture, and is a recipient of 29 honorary degrees as well as numerous awards, including the US Presidential Medal of Freedom.

During the Public Lecture, Dr Cerf discussed how the pandemic has created a need for patients to access medical care while remaining socially isolated from doctors and other medical practitioners. This eventually led him to contemplate more about the “possibilities of remote medicine and patient monitoring, where our connected devices, with their own sensors and data collection capabilities, could link up to form an ‘Internet of Things’ continuously monitoring our health.” Dr Cerf explored the potential benefits that could be derived from the collected data at an aggregate level. He offered a balanced perspective about the risks associated with such innovations and analytics, including how stakeholders may work to mitigate these risks.

Young Female Entrepreneurs of Afghanistan

Amidst the humanitarian crisis in Afghanistan, the University of Central Asia organized its first Entrepreneurship Programme Leaders exhibition to display products produced by the graduates of the School of Professional and Continuing Education (SPCE) in Faizabad.

Over 100 SPCE learners, their families, and representatives from local banks attended the exhibition encouraging female entrepreneurs to showcase their exceptional skills and products.

“We did not expect to sell any of our confectionary items, but ended up making 100% profit at the exhibition,” said Khajistan Farjam and Mahasiba Azimi, SPCE graduates.
Renewing Economic Relations Between India and Central Asia

India’s linkages with the Central Asian region date back to ancient history. The Silk Road connected the subcontinent with the steppes and the mountains of Eurasia and allowed not only transport of goods and trade, but ideas, philosophy, and religion.

To highlight the importance of strengthening India-Central Asia relationship and reviving the historical, cultural, and diplomatic links, the University of Central Asia (UCA), along with other partner institutions, organised an online conference “The Current Dynamics of India-Central Asia Cooperation: New Opportunities and Challenges”. The forum brought together academics, diplomats, and others interested in reviving this Silk Road regional cooperation, on February 10th.

Dr Roman Mogilevskii, Associate Director and Senior Research Fellow at UCA’s Institute of Public Policy and Administration, spoke about trade and economic relationship between India and Central Asia at the conference. According to Dr Mogilevskii, trade between Central Asian countries and India has a huge untapped potential. However, there are several impediments, including railway connections, automobilen roads, and the landlocked geography of the Central Asian region.

Currently there are two important infrastructure projects under construction. The Turkmenistan-Afghanistan-Pakistan-India (TAPI) natural gas pipeline, also known as the Peace Pipeline planned back in the 1990s; and the Central Asia South Asia Electricity Transmission and Trade Project (CASA-1000), between Central and South Asia to create and develop inter-regional linkages that was launched in 2016. CASA-1000 is intended to help the export of surplus hydroelectricity from Kyrgyzstan and Tajikistan to Afghanistan and Pakistan. The progress of these two mega projects has been slower than expected.

The Conference was organized in collaboration with the University of Central Asia, Jindal School of International Affairs, O.P. Jindal Global University (India), University of World Economy and Diplomacy (Uzbekistan), and Al-Farabi Kazakh National University (Kazakhstan).

Vint Cerf on the Future of Remote Medicine

Along with the opportunity of widening access to healthcare, the innovative technology will enable practitioners to preempt ill health and put in place suitable services. Previously, doctors would only see patients when they were sick. Remote patient monitoring allows doctors to check on a patient’s data even during healthy periods, and devices could alert doctors of any patient anomalies. Detection of potential health issues can allow intervention, which could save lives.

Dr Cerf highlighted that these new technologies are not without challenges. An open-source software, connecting these devices, could potentially be open to dangerous cyber-attacks. Advanced technologies such as AI and Machine Learning have to be carefully tested to prevent incorrect patient diagnoses.

The lecture was followed by a Q&A, moderated by Shaukat Ali Khan, former CIO of UCA, and now Global CIO of AKU. The Panel Discussion included representatives from Kyrgyz and Tajik ministries.

The Panel raised thought provoking questions about the limitations of its implementation in the remote mountain environments where electricity and internet connectivity are intermittent; the potential of “monitoring fatigue”; government and private sector responsibilities for ensuring connectivity for a population, and the ethical use of data.

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**Young Female Entrepreneurs of Afghanistan**

SPCE offers entrepreneurship programmes to enable young Afghans to generate incomes by establishing small or medium scale businesses. A diverse range of products were exhibited including confectionery, clothes, dairy products, paintings, homemade soaps, and food items.

“Although I learned technical skills of producing dairy products from the Aga Khan Foundation, I lacked understanding of establishing a business. SPCE provided me with knowledge to develop Unique Selling Points, which helped me launch my business. I ended up making 300% profit during the exhibition,” said Hamisha Bahar.
Life of Artisans on the Ancient Silk Road

The film "Road of Hope and Heritage" opens with a shot of distant mountain range covered by clouds. The wind and light over the mountains create impressions of kurak, a Kyrgyz traditional patchwork. Kura in Kyrgyz language means to patch, or to combine separate pieces together, creating a single canvas.

The stories of craftspeople and musicians in the Cultural Heritage and Humanities Unit's recent film directed by Aibek Bayimbetov (researcher at UCA), are also pieces of a patchwork creating a bigger picture of the trials, tribulations, and hopes of people living along the ancient Silk Road.

Over the course of centuries, the Silk Road has connected Asia and Europe through an intricate network of paths. The current interest in renewed trade between Central and Southeast Asia has created opportunities for further infrastructural developments.

The film shows the faces of representatives of mountain communities in the Alai region of Kyrgyzstan and Gilgit-Baltistan of Pakistan: craftspeople at work talking about their trade and handicraft skills inherited from their ancestors. A woman from Alai talks about how the harsh climate and elevation do not allow her to grow agricultural products, so the small village relies on profits from mountain tourism and handicrafts. A farmer expresses concerns about the proximity of huge industrial mining projects near his village: the extraction brings dust and deteriorates mountain pastures in Kok-Suu. On a different part of the road, a local researcher from the Sost village in Gilgit Baltistan, gives a simple recipe: “Happiness lies in good words, good deeds, and good wishes”.

The Road of Hope and Heritage is an ethnographic documentary produced with the support of the Resilient Silk Road Heritage Network Project funded by the UK’s Global Challenges Research Fund (GCRF). The GCRF project links local organizations and academic institutions in Pakistan, Tajikistan, and Kyrgyzstan to help develop resilient local economies and sustainable mountain societies. The GCRF Network also aims to develop a stronger South-South collaboration and knowledge sharing platform for building lasting networks for communication and future development.

The film will be shown during the traveling exhibition of Central Asian artists in Bishkek, Tashkent, Dushanbe, Almaty and Peshawar in February-March 2022, and will be available later on UCA’s YouTube channel. Teaser: [https://www.youtube.com/watch?v=314hoYT-rPk&t=42s](https://www.youtube.com/watch?v=314hoYT-rPk&t=42s).

Aspiring Students attend Open House at UCA

At an Open House on 20th February, aspiring students spent several hours with UCA faculty, staff, and senior students learning about undergraduate degree programmes, financial aid and scholarships, student life and clubs, residential life on campus, and research and internship opportunities. Students’ parents were also invited to the Open House and had in-person conversations with faculty members to learn more about academic opportunities during the five-year degree programme.

The Open House attracted high school students from various regions of Kyrgyzstan to visit UCA’s Naryn Campus for a firsthand experience of academic and student life at the School of Arts and Sciences.

UCA faculty, Lucy Palmer, sharing information about the Communications and Media programme.

In Khorog, the Student Life Team along with faculty and students conducted a seminar on admissions for several high schools. Students engaged in an interactive Q&A session and received information and other details for applying.
Three UCA Students Spend Semester in Norway

The University of Central Asia’s School of Arts and Sciences had signed an Inter-Institutional Agreement with the University of South-Eastern Norway (USN) in 2021 to enable UCA students to spend a semester abroad. After a careful evaluation of the students’ academic and extra-curricular records, UCA nominated three junior students: Khonum Vafodorova, Mahtob Mirzojonova and Wajahat Khan, to participate in the Erasmus+ Learning Mobility programme.

“It was challenging to go through the entire selection process, especially during the pandemic, but with support from the Co-operative Education Department we are finally here. I am taking courses in Global Marketing, Sustainable Tourism and Service Management,” said Khonum. These courses will provide students with knowledge of best practices which can be applied in the Central Asian context.

“One thing that is particularly reassuring is that there is not much difference between the educational systems of USN and UCA. Both universities deliver quality education, use e-learning tools, provide academic and personal counseling, and have a dynamic student life,” continued Khonum.

This collaboration between the two universities is providing students with opportunities to engage with global academic institutions, discover diverse cultures, and promote a more pluralistic understanding of the world.

Traveling Exhibition: Vision of the Future

In February, UCA’s Cultural Heritage and Humanities Unit (CHHU) participated in an international traveling exhibition in Pakistan called “Vision of the Future: Transportation Corridors in High Asia”, devoted to various forms of artistic expressions of the mountain communities of Kyrgyzstan, Tajikistan and Pakistan.

During the visit, CHHU representatives took part in presentations and discussions at the Peshawar Museum of Archeology and Culture with their colleagues from Uzbekistan and the northern regions of Pakistan. Discussions touched upon the problems of preserving heritage and developing cultural tourism, that could become the main drivers of economic development and international relations in the region. CHHU’s visit to Pakistan also included a musical performance by Kyrgyz musicians, including Elmira Kochumkulova, Head of the CHHU department, and Aidai Kalmamatova, representative of the Kyrgyz Kairyk Youth Ensemble. They were joined by other musical groups from different regions of Pakistan.

The exhibition will continue its travel to various locations, including Almaty, Bishkek, and Dushanbe in March and April. The project is part of the “Resilient Silk Route Heritage Network” funded by the Global Challenges Research Fund, UK.

The Nomadic Image 2022

The University of Central Asia invites practitioners and theorists to submit their abstracts for the Seventh Transdisciplinary International Conference to be held in September 2022 in Kyrgyzstan. In a hybrid online and in-person event hosted by UCA on its Naryn campus, the conference offers an exciting opportunity for international participants to connect with Kyrgyz and other Central Asian artists and scholars to explore experimental imaging cultures at the crossroads between East and West, and hypermodernity and tradition. The conference is a collaboration between the University of Central Asia and the University of New South Wales, Faculty of Arts, Design and Architecture, and supported by Ololo House, Bishkek and the Ala-Too International University. For submission and more information, please visit: https://bit.ly/3vlpSUs.
Preserving Wild Apple Species in Western Tian Shan

Historical accounts indicate that the first apple trees appeared in the mountainous parts of Central Asia, including the territory of present-day Kyrgyzstan. Ancient trade routes took its seeds across the world as Egyptians began planting apple orchards along the Nile Delta, and Romans brought them to Britain. Later in the 16th century, Spaniards introduced apples to the Americas.

The ancestor of all cultivated apples and eaten around the world, Malus sieversii, is also a native of Central Asia. This wild apple species can still be found in the Tian Shan mountains, a home to many other wild fruits and nuts. Unfortunately, about 44 species of trees and shrubs in the region are critically endangered or vulnerable. They have been threatened for decades by overgrazing, diseases, timber-felling for fuel, and more recently, climate change.

To preserve these wild trees, UCA’s Mountain Society Research Institute (MSRI) and the Aga Khan Foundation’s Mountain Societies Development Support Programme are implementing a joint project on the Conservation and Research of Wild Fruit Species in the Western Tian Shan.

Since wild species of apples represent a valuable genetic pool, it is a priceless resource for identifying genes that may code for disease resistance or flavor. If commercial crops are susceptible to change because of weather or insects, wild species provide a possible solution, because they have the gene pool that might help new varieties of apples to adapt to colder or warmer climates or remain resistant to pests.

The majority of Kyrgyz population in the rural areas rely greatly on forests as a source of income generation. Since walnuts contribute to household income, residents choose to cut down any except walnut trees for commercial or personal use of timber. In addition, livestock browsing freely in the forest, destroy young trees and damage stems and branches of adult trees. People also deplete apple seeds from the forest by crushing for juicing or as dry fruit. According to Dr Maksim Kulikov, Research Fellow at UCA, all these activities strongly limit the propagation of wild apple species and loss of genetic diversity.

Funded by Critical Ecosystem Partnership Fund and launched in 2021, UCA’s research concentrates on two nature protected areas of Kyrgyzstan – Sary-Chelek Biosphere Reserve, and Padysha-Ata Nature Reserve, and additionally in Kara-Alma forestry unit which still contains rare species of apple and pear trees threatened with extinction due to human and climate change impacts. MSRI conducted environmental and socio-economic surveys that involved mapping of tree groups in the forest and interviewed 220 households in three target villages. The interviews have provided valuable information about local livelihood strategies that should contribute to understanding development needs in the project areas. The results of this socio-economic study will be published later in 2022.

CAFDP Alum Joins Graduate School of UCA

“In 2011, I attended a meeting at Kazakh-German University in Almaty where a UCA representative was presenting the Central Asian Faculty Development Programme (CAFDP). I instantly decided to apply, and this scholarship has deepened my understanding of international development,” said Dr Anel Kulakhmetova, a CAFDP Fellow who has now returned to the University of Central Asia’s Graduate School of Development (GSD) as a Research Fellow and Communications Lead.

Dr Kulakhmetova, who joined GSD in 2021 says, “I work with a diverse range of colleagues from different divisions, and enjoy coordinating research outcomes for dissemination to the larger academic community. These past few months has shown me the richness of the research conducted by the University.”

Describing her job responsibilities, she continued, “It awes me because over the course of one week I might read about saving wild trees species in the Tian Shan mountains, improving pollution levels in the city of Bishkek, preserving ancient crafts of the mountainous communities, or resolving water security conflicts in the valley of the Isfara river. You never get bored with such diverse projects.”

Highlighting the significant role played by CAFDP in helping young Central Asians to pursue graduate studies in international universities, Dr Kulakhmetova said, “I think CAFDP is a unique full scholarship programme, because it gives opportunities to scholars from Central Asia and takes them to the best universities in the world with a goal to then bring qualified professionals back to the region.”
Employee Spotlight

Nurbek Nisharapov: From SPCE Alum to Country Head

“I was in the ninth-grade when the University of Central Asia was founded by treaty with the Governments of Kyrgyzstan, Tajikistan and Kazakhstan in 2000. I had no clue how significant this University was going to be in the region,” said Nurbek Nisharapov, Country Head of the School of Professional and Continuing Education in Kyrgyzstan.

Nurbek’s affiliation with UCA dates back to 2007, when he joined SPCE to attend a course to train as a Mountain Tour Operator, “It was a very fulfilling course. I did not study in the modern building that SPCE has today, but the enthusiasm and knowledge I learned will stay with me throughout my life.”

A native of Naryn, Nurbek began working at SPCE as a Communications Intern in 2011 after graduating from the Naryn State University and Yuan Ze University (Taiwan). “At that time, I could not comprehend the mission of UCA or understand the impact of quality education on young lives, but fortunately today’s generation knows the application of these learned concepts.”

Responding to why he chose to return to Naryn, he shared a beautiful Kyrgyz saying that translates as: “The salt of Naryn is very strong, the one who chooses to engage with the region can never really leave.” Nurbek said that he connects with the community and understands its needs and aspirations. “I am sure that Naryn holds the potential to be an educational hub of the nation. Even if the younger generation fly abroad, they will come back one day to serve the region.”

The Aga Khan Development Network and the University of Central Asia are creating opportunities for youth of the region to actively participate in the development of their respective countries in Central Asia. Nurbek has not been only playing a role of leader and mentor at SPCE, but his office remains open to anyone struggling with personal or professional issues. In February 2022, for the second time, he was elected as Chairman of the Board of Trustees of Naryn State University. Nurbek also voluntarily serves on the Board of Education of Naryn Town, and as Deputy Member of the Board of Social Affairs (Town Council).

SPCE Kyrgyzstan has received several awards and recognitions during Nurbek’s term. In 2021, SPCE Naryn was given the Best Partner Organisation award during ceremony organised by the Naryn government, where Nurbek himself was also honoured with the Best Young Manager Award.

Three UCA Faculty Pursue PhDs at Simon Fraser University

With the signing of the MOU in 2020, Simon Fraser University (SFU) in Vancouver Canada has already established itself as one of UCA’s significant partners, particularly in the area of faculty development. As part of UCA’s Central Asian Faculty Development Programme (CAFDP), three faculty members are pursuing their PhDs at SFU. As a result of the success of the CAFDP programme, UCA-SFU International Offices, with a UCA PhD candidate, will be making a presentation on this partnership at the prestigious Asia-Pacific Association for International Education Conference later in 2022.
“Never Give Up” Highlights Entrepreneurship Spirit in Naryn

In 2018, there were 2.5 million economically active people in Kyrgyzstan with 61% men in the labor force. Based on a report published by UN Women in 2021, approximately 38% of working women in the Republic quit their jobs for several reasons including childbirth and family responsibilities.

With an average wage of only US$ 230 per month in Kyrgyzstan, and the devastating impact of COVID-19 on the economy, and Real GDP contracting by 8.6%, almost 40,000 people lost their jobs. The pandemic exacerbated existing structural and gender inequalities in employment with around 52% of low-income families reporting deterioration in their financial situation.

A land-locked country such as Kyrgyzstan whose economy relies mainly on services, remittances, and natural resources, the University of Central Asia (UCA), with its mission to develop human capital in the region, launched the Naryn Centre for Entrepreneurship (NCE) in 2021.

Hailing from Naryn city, Zhanara Erkinbek Kyzy, graduated from Naryn State University in 2018 with a degree in English Language and Literature. After studying for four years, she expected to find a suitable job that would help feed her family. “I struggled a lot to find a job related to my field but remained unemployed and eventually had to become a part-time tour guide at a local art gallery.” Zhanara decided not to give up on her hope of being successful, and feeding her family was a strong motivation. “If I could not find a livelihood then I had to build one for myself as giving up was not an option.” She took a loan of 20,000 KGS (US$ 240) to start an English Language Centre named “Speak Up”. She rented one room to establish her modest start-up enterprise, and later hired two employees as business began to grow.

“I started earning decent money but felt I lacked the knowledge of important business concepts. In 2021, when NCE was launched and there was a call to join the first cohort, I grabbed the opportunity without hesitation. With UCA’s credibility and training that was provided free of charge, I finally had the chance to further develop my skills.”

NCE was established with the objective of creating job opportunities in mountain communities. It provides Expert Entrepreneurship and Business Incubation programmes to teach students advanced business concepts, including leadership and management, along with providing them with a workspace, mentorship support, and networking opportunities.

“Witnessing my professional growth, my husband also enrolled himself in the second cohort at NCE and is working on a business model for establishing a clothing boutique in Naryn. We also plan to further expand the English Language Centre. NCE has provided us the knowledge to build our Unique Selling Points so that our businesses stand out among the competitors.”

In high spirit and an optimistic outlook for future, Zhanara shared, “Never give up and always look for opportunities to make your dreams come true. Life is too short to be afraid of embarking on new ventures.”

NCE has been established with a generous support from The United States Agency for International Development and the Aga Khan Foundation. A similar Centre has been also launched in Khorog, Tajikistan.

### Second Cohort Start Classes at NCE

UCA’s Naryn Centre for Entrepreneurship launched the 5th module of Business Model Canvas for its 2nd Cohort comprising of 40 trainees from Naryn, Kyrgyzstan. Having understood the key elements of design thinking and conducting research on customer expectations in previous modules, students are now developing key documents of financial modelling, market analysis, and rationale for the business.
The dissolution of the Soviet Union and the 1992-96 Tajik civil war resulted in huge human and economic losses. Nevertheless, contemporary data suggests the persistence of investments in human capital in the region most affected by famine and least favoured since the cessation of hostilities in the Gorno-Badakhshan Autonomous Oblast. Famine-affected women have higher educational attainment, later ages of marriage, and lower fertility than those in the neighbouring border province of Khatlon. Educational interactions between adults and children under the age six are much more frequent.

The continued emphasis on human capital after the economic collapse is consistent with a locational imperative for households to earn incomes outside of agriculture, and with a higher relative status of women in non-agrarian societies.

Read more online in English or Russian.