

### Job Vacancy: Full-Time Faculty Position in Computer

#### Science: Assistant Professor

#### Programme: Computer Science

School: School of Arts and Sciences
Reports to: Associate Dean, Naryn Campus
Duty Station: Naryn Campus, Naryn, Kyrgyzstan
Application Deadline: 31 March 2025
Contract Period: Fixed term for 2 years, renewable with potential transition to open-ended contract after 2 years

#### **Position Summary**

The University of Central Asia (UCA) is excited to offer a full-time residential faculty position in the Department of Computer Science at our Naryn Campus. This is an excellent opportunity for early career academics and postdoctoral students, passionate about research and teaching to contribute to a world-class undergraduate programme in Computer Science, originally developed in collaboration with the University of Toronto. As a faculty member, you will play an essential role in delivering cutting-edge courses, shaping an innovative curriculum, and developing research agenda that drives both academic excellence and regional development.

The position offers an outstanding platform for developing an academic and professional profile at a young and emerging university. Well-supported by senior Faculty, our Centre for Teaching and Learning Technology, and experienced academic mentors from across the University, the appointed Faculty will also have the opportunity to engage in cross-disciplinary initiatives alongside UCA's Graduate School of Development, focusing on high-impact areas such as Digital Policy, Cybersecurity, and Data Science. We are particularly eager to encourage applications from early career female scholars, supporting their contributions to advancing the field of Computer Science. This position offers a unique opportunity to contribute to a growing institution with ambitious goals for regional impact and academic excellence. If you are a passionate, innovative, ambitious early career educator and researcher, we encourage you to apply.

## **Key Responsibilities**

- **Teaching**: Deliver courses across the Computer Science undergraduate curriculum, including courses on theoretical foundations, applied programming, and hardware concepts. Engage students through interactive lessons, hands-on projects, and practical lab work.
- **Curriculum Development**: Contribute to the development and continuous improvement of the Computer Science curriculum, ensuring it remains at the forefront of global advancements in the field.
- **Research**: Develop individual research initiatives that align with UCA's mission to drive regional development, especially in the areas of technology, innovation, and sustainability and contribute to joint research initiatives with senior faculty and with industrial partners regionally and internationally.
- **Collaboration and community engagement**: Engage with and learn from other academic programs at UCA, particularly those focused on Data Science, Cybersecurity, Digital Policy and the development of the Central Asian Data Hub, through UCA's Graduate School of Development.

# **About UCA's Academic Programmes**

UCA's **School of Arts and Sciences** combines the best of a student-centred liberal arts environment with the intellectual rigor of a research university. The faculty is committed to offering an inclusive, engaging, and dynamic academic experience, delivered in English, to ensure that students are prepared to contribute meaningfully to both regional and global challenges. UCA encourages collaborative teaching, especially across disciplines such as Economics, Media and Communications, and Earth and Environmental Sciences, which provides opportunities for faculty to engage in a wide range of cross-disciplinary research.

Our **GraduateSchool of Development** is actively developing postgraduate programmes and focuses on research in areas such as Digital Policy and Cybersecurity. This provides additional opportunities for collaboration and knowledge exchange, allowing faculty to engage with and contribute to global developments in these fields.

## **Computer Science Programme Overview**

UCA's Computer Science programme is designed to provide students with a comprehensive understanding of technology, from mathematical foundations to applied programming skills. The curriculum is built to empower students to engage with all aspects of the technology world, whether by launching a technology start-up or pursuing graduate studies. In addition to theoretical courses, students participate in hands-on lab work and practical projects that challenge them to solve real-world problems. Annual internships provide students with industry exposure and help build professional connections. The curriculum's strong emphasis on interdisciplinary learning also allows students to apply their skills across a variety of fields, including business, development, and policy.

# UCA Background:

The University of Central Asia (UCA) was founded in 2000 as a private, not for profit, secular university through an International Treaty signed by the Presidents of Tajikistan, Kyrgyzstan and Kazakhstan, and His Highness the Aga Khan; ratified by their respective parliaments, and registered with the United Nations. The Presidents are the Patrons of the University and His Highness is the Chancellor. UCA's mission is to promote the social and economic development of Central Asia, particularly its mountain communities, by offering an internationally recognised standard of higher education and becoming a leading research university in the region and internationally. UCA brings with it the broader commitment and partnership of the Aga Khan Development Network. For more information: www.ucentralasia.org

## **Minimum Qualifications**

- Ph.D. from a reputable university with specialization in Computer Science or Computer Engineering and a clear potential for high-level research, particularly in collaborative settings.
- Fluency in English is required but further support in English language acquisition can be provided for outstanding candidates with more limited English.
- Potential to develop a profile of national and international repute in research publication, knowledge exchange, impact and grant capture.

# Why Join UCA?

• **Impactful Teaching and Research**: Contribute to an academic institution that is dedicated to fostering innovation and development in Central Asia and beyond.

- **Collaboration and Growth**: Be part of a diverse, interdisciplinary academic environment, with opportunities for collaboration and research across multiple fields of societal relevance.
- **Regional Leadership**: Lead the development of innovative solutions to regional challenges in technology, data science, and digital policy.
- **Support for Female Scholars**: UCA is deeply committed to supporting female scholars in STEM fields, providing opportunities to further advance gender equity in academia.

## **Teaching experience requirements:**

- Demonstrated subject knowledge across diverse core and elective courses;
- A demonstrated commitment to teaching and student learning experience. At least 2 years of teaching experience at the undergraduate level is expected, including as Teaching Assistant during previous studies;
- Willingness to and/or experience of using innovative teaching methods and evaluation methodologies;
- The priority will be given to candidates who have experience in teaching the following courses:
  - Web and Internet Technologies
  - Object-Oriented Programming
  - Operating Systems
  - Database Management Systems
  - Computer Graphics
  - o Artificial Intelligence
  - o Digital Logic and Design
- Engage with the development of postgraduate programmes.

## Research experience requirements:

• The ability to publish research in web of sciences impact factor journals, Scopus indexed journals, ACM and AAAI conferences, NeurIPS, ICML or other top computer science venues;

- Regular attendance and experience with presenting at international conferences desirable;
- Aware of current and future industry trends; strong network of industry contacts to support internship programs, project collaborations and industrial mentoring;
- Interest in publishing research papers and working on research projects with undergraduate students.
- Experience in grant capture would be beneficia land a willingness to develop these attributes essential.
- Awareness of current and future industry trends and a willingness to engage with the public and private sector;

## How to Apply

Please submit your application (cover letter, updated resume or CV, research statement, teaching statement, a sample of a research paper, and contact information of three references) on <a href="https://tinyurl.com/59h9z7f9">https://tinyurl.com/59h9z7f9</a> by 31 March 2025.

Applications will be reviewed when received. Early applications are strongly encouraged.

Review other job vacancies at: https://ucentralasia.org/career-opportunities