

☒ I offer my expertise to participate as a Partner in a HE Project

☒ I am planning to coordinate a project and I am looking for Project Partners

#### TOPICS OF INTEREST

Interested in the following upcoming calls

Leveraging artificial intelligence for creativity-driven innovation  
HORIZON-CL2-2025-01-HERITAGE-04

#### PARTNER INFORMATION

Founded in 1991, the American University of Armenia (AUA) is a private academic institution that provides American-style education in Armenia. As an affiliate of the University of California and accredited by the Western Association of Schools and Colleges (WASC) Senior College and University Commission.

Currently, AUA offers eight undergraduate and eleven graduate programs and multiple research opportunities for faculty and students. In that regard, the University has been awarded external funding for the implementation of over 300 initiatives and projects in research, education, specialized training, infrastructure improvement and capacity-building. The university is home to seven research centers, each specializing in their respective fields of expertise, including environmental studies, business, health services, applied linguistics, engineering, legal studies, and social sciences.

With a proven track record of over 20 years of its results-driven approach to managing diverse and complex projects, AUA has secured funding from major funding sources, such as Horizon Europe, U.S. Agency for International Development (USAID), U.S. Embassy in Armenia, Swedish International Development Cooperation Agency (SIDA), World Bank, German Agency for International Cooperation (GIZ), and the United Nations. The University is currently leading innovative initiatives of significance to the local and economy and country and region development in areas such as environmental sustainability, renewable energy, journalism, media, public relations, public health, business expansion, artificial intelligence, and engineering, making it a global hub for research and collaboration.

#### Description of the Legal Entity

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|--|--|--|
| <input type="checkbox"/> <u>Higher Education</u> | <input type="checkbox"/> <u>Research Institution</u> | <input type="checkbox"/> Public Administration |
| <input type="checkbox"/> Industry /SME           | <input type="checkbox"/> NGO                         | <input type="checkbox"/> Other                 |

**Description of the Research Team or Group:**

The Data Science and Artificial Intelligence faculty team at the American University of Armenia (AUA) brings together a group of educators and researchers whose expertise spans machine learning, data analytics, computational modeling, cognitive science, and domain-specific AI applications.

- **Dr. Habet Madoyan** is an Assistant Professor and the founding Chair of the BS in Data Science program at AUA. With a PhD in Management and an MBA, he specializes in data visualization, predictive analytics, and large-scale data projects for international organizations including UNICEF and UNDP.
- **Dr. Vahe Movsisyan**, Adjunct Lecturer and co-founder of Datamotus LLC, brings over 15 years of applied experience in statistics and econometrics. His focus includes survey methodology, forecasting, and workflow automation with R and Python.
- **Dr. Tadamasa Sawada** is a cognitive scientist and Adjunct Lecturer with a PhD in Information Processing. His research in visual perception and human-machine interaction informs cutting-edge developments in robotics, AR/VR, and AI-based vision systems.
- **Elen Vardanyan** is an Adjunct Lecturer and PhD candidate at ENSAE Paris. With a background in machine learning and generative models, she has led academic-industry collaborations with BMW, ServiceTitan, and Helmholtz Zentrum München, and her work has been featured at ICML and AAAI.
- **Aleksandr Hayrapetyan**, Adjunct Lecturer and Junior Researcher at YSU, specializes in deep learning and optical computing. His interdisciplinary work bridges AI and physics, with applications in image processing and neural modeling.
- **Dr. Davit Ghazaryan**, Associate Professor and machine learning specialist, has led national AI initiatives in healthcare and defense. His teaching and research span neural networks, predictive maintenance, and scalable system design.
- **Gagik Khalafyan** is a Lecturer in Computer Science and a data scientist certified in cloud-based machine learning by AWS. He has completed over 100 freelance projects and teaches programming, data structures, and cloud computing at AUA.
- **Dr. Nerses Srapionyan** is an Instructor at AUA and YSU with a PhD in Mathematics. He teaches calculus and numerical methods and applies mathematical modeling in industry and research roles, including Perigon AI and Beegraphy.
- **Dr. Sachin Kumar**, Associate Professor at AUA, has over 15 years of international experience in AI and biomedical informatics. Recognized among Stanford's Top 2% Scientists, he leads research in federated learning, IoMT, and secure AI systems, and serves as Associate Editor for multiple high-impact journals.

#### **Expertise of the Team Leader:**

Dr. Habet Madoyan is an Assistant Professor and the inaugural Chair of the Bachelor of Science in Data Science (BSDS) program at the American University of Armenia (AUA), where he has been a faculty member since 2013. His academic and professional expertise spans a wide range of data science disciplines, including conjoint analysis, machine learning, predictive modeling, data visualization, optimization, and forecasting. Dr. Madoyan is also an entrepreneur and active member of the data science community in Armenia, having founded a data-science consulting company and co-founded Mychoice, an online market research tool that automates conjoint analysis from experimental design to report generation. He holds a PhD in Management from the National Academy of Sciences of Armenia and an MBA from the University of Missouri, Columbia. At AUA, he teaches courses such as Applied Statistics, Data Mining and Predictive Analytics, Sports Analytics, and Design and Analysis of Experiments. Dr. Madoyan is deeply committed to mentoring students and fostering innovation through capstone projects that bridge academic learning with real-world applications.

#### **Potential role**

☒ **Research**

☐ **Technology Development**

V ☐ **Dissemination**

V ☐ **Training**

Already experience as a by institute)	Coordinator	<input checked="" type="checkbox"/> <b>YES</b>	<input type="checkbox"/> NO (Project manager of consortia managed
	Partner	<input checked="" type="checkbox"/> <b>YES</b>	<input type="checkbox"/> NO
	Expert Evaluator	<input type="checkbox"/> YES	<input type="checkbox"/> NO

**CONTACT DETAILS**

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