

## **DISCOVER-US: COLLABORATION WITH NSF ON FUNDAMENTAL RESEARCH ON NEW CONCEPTS FOR DISTRIBUTED**

### **Description**

The DISCOVER-US project aims to:

- Strengthen long-term collaboration between the EU and the US by creating networking and collaboration opportunities to promote cooperation on new concepts and visions for the computing continuum, distributed computing and swarm intelligence.
- Facilitate brokerage events for on-going and future work streams in EU and US projects addressing the edge-cloud continuum.
- Implement research exchange and fellowship programmes to encourage and initiate collaboration.
- Create a EU-US collaboration support infrastructure consisting of various services: networking, brokerage, training, vision building, communication and dissemination.

Content-wise, DISCOVER-US will focus on the following four key research topics for the collaboration.

- Managing complexity through high levels of abstraction.
- New concepts for distributed computing, the computing continuum, swarm intelligence and edge intelligent things.
- AI-based concepts for self-organized, dynamic, and adaptive management.
- Collaborative programming frameworks and software development tools.

DISCOVER-US will boost synergies, experience and knowledge sharing and lay the ground work for creating a EU-US collaborative research ecosystem for pre-competitive research in the computing continuum, distributed computing and swarm intelligence. It will strengthen the transatlantic research efforts in this area and also strengthen Europe's position in the cloud to edge computing, and in the Internet of Things (IoT) and the tactile internet. This will be achieved by integrating relevant elements of computing, connectivity, IoT, artificial intelligence (AI) and cybersecurity.

The project will run for 30 months, will deliver a vision on the computing continuum, distributed computing and swarm intelligence, create a transatlantic research community of about 100 senior researchers, and fund about 20 pre-competitive transatlantic research collaborations.

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