

Annexe: Cisco-NUS Accelerated Digital Economy Corporate Laboratory – Research Activities

The new Cisco-NUS Accelerated Digital Economy Corporate Laboratory will take a multi-sectoral and multi-disciplinary approach to accelerate Singapore's Digital Economy transformation by developing solutions to automate and scale business operations; developing intelligent infrastructure for healthcare; building and operationalising secure and resilient next-generation infrastructure for Internet of Things and enterprise environments; and harnessing technology to augment and drive productivity of a future-ready professional workforce.

The Lab will conduct research activities under five key areas:

- **Artificial Intelligence (AI):** Researchers will develop AI algorithms to enhance search, extraction and learning of knowledge from operational data collected in workplace environments, and to develop reusable data-driven conversational agents (or "chatbots") for intelligent and collaborative interactions with humans.
- **Healthcare:** Researchers will look at equipping hospitals with distributed and coordinated intelligence to improve their operational and clinical efficiency by facilitating sensing, understanding and interaction. Some potential applications include monitoring and active intervention for patients in the Emergency Department and monitoring of healthcare workers and human factors to improve performance.
- **Cybersecurity:** Researchers will conduct network-centric cybersecurity research and develop novel solutions for deployment in enterprises and industries. They will also develop an experimental cybersecurity testbed to demonstrate cybersecurity solutions.
- **Urban Infrastructure:** Researchers will develop enhanced collection and processing strategies as well as network infrastructure and data-driven solutions to enable applications such as transportation planning, predictive maintenance under network variability, and traffic management for autonomous vehicles.
- **Future Workforce and Productivity:** Combining NUS' educational expertise with Cisco's experience in workforce training, researchers will harness technology to develop the best learning practices to generate greater productivity.