EPFL teams up with eight partner organizations to build “digital trust”

EPFL President Martin Vetterli has today unveiled plans to create the EPFL Center for Digital Trust. Eight institutional and industrial partners are already willing to join. This new research platform will aim to be a center of excellence for IT security and personal data protection in the digital era.

“Digitailization is often compared to a huge wave surging across the earth. People need to know the basics if they want to ride that wave confidently and have trust in it,” says Martin Vetterli, President of the Ecole polytechnique fédérale de Lausanne (EPFL). Vetterli intends to help anchor that trust, which is essential for an open, democratic society, economic prosperity, and personal freedom, and to that end has announced a new Center for Digital Trust based at EPFL. The statement was made during the 2017 Cybersecurity day (www.cybersecurityday.ch), held at EPFL in the presence of Federal Councillor Guy Parmelin.

Individual citizens and major multinationals alike must adapt to the changes being imposed by digitalization – whether that involves learning how to use new software or adapting to new working methods. Such technological progress is paving the way to Industry 4.0, a new paradigm where companies must rethink their entire business models. These challenges are at the top of the agenda for business leaders and policymakers alike; Switzerland alone counts over 80 recent parliamentary actions on the issue.

Switzerland is in key position to catch the opportunities
The digital revolution is nothing less than a goldmine of opportunity for Switzerland. The country’s long tradition of neutrality, together with its world-caliber expertise recognized by research institutions across the globe, make it ideally placed to lay the groundwork for the new concept of digital trust. “Digital trust will be at the core of our strategy,” says Jean-Pierre Hubaux, the Center’s academic director. “We want to become a center of excellence in the field, where all of our partners – regardless of how they are using digital services – can find answers to their questions and support for their goals.”

The Center will address the three critical challenges of this digital era: cybersecurity, which involves making sure that data transferred across networks cannot be hacked; transparency, which means making it clear how data is processed, sent and stored; and personal data protection, so that sensitive information, such as bank account details and medical records, stays out of malevolent hands. Engineers at the Center will work in parallel to develop new systems and methods in all three areas.

High-level partners in close relationship to the citizens and the industry
The Center will combine EPFL’s renowned expertise in cybersecurity, sensitive data protection and blockchain and smart-contracting technology with the advanced capabilities of institutions such as the International Committee of the Red Cross (ICRC) and the Lausanne University Hospital (CHUV), as well as companies including ELCA, SICPA,
Swisscom, Swissquote, SGS and SwissRe, who have already stated their strong interest in joining the Center.

These partner organizations are in direct contact with individuals and businesses, and will strive to identify their needs and concerns related to the digital revolution. The organizations will also contribute their own experts to the research being done at EPFL in order to develop solutions to concrete problems, and will help to fund the Center.

Two new EPFL chairs and 24 labs involved
EPFL has created two new teaching and research chairs in digital trust, and the search for candidates is already under way. The School also has 24 research labs in this field, mostly within the School of Computer and Communication Sciences, the School of Life Sciences and the College of Management of Technology. “It’s a genuine ecosystem that addresses the needs of the entire population. The challenges are so great that there’s no way we could overcome them without a cross-disciplinary approach,” says Hubaux. The first step will be to develop trust technologies and systems that can form a bedrock of trust between users and service providers – thereby encouraging the adoption and effective use of new technology.

Designed with ambitious goals in mind, the Center got an additional boost from the Swiss Federal Parliament’s decision to cap budget cuts in the areas of education, research and innovation. EPFL will leverage this opportunity to invest in research that will tackle not only the challenges mentioned above, but also those that are bound to come.

Support from the Conference of Ministers of Economy of Western Switzerland
The Conference of Ministers of Economy of Western Switzerland (the cantons of Vaud, Neuchatel, Valais, Geneva, Bern, Fribourg and Jura), currently headed by Pierre Maudet, a member of Geneva’s cantonal government, has applauded the initiative. “This new partnership between the public and private sectors will position Switzerland as a major player in both cybersecurity and the digital trust that our society needs. We encourage all companies and research institutions working in this field to join in,” says Maudet. Philippe Leuba, the member of the Vaud cantonal government who handles innovation-linked relations between the cantonal government and EPFL, adds: “Our region is home to businesses and institutions at the forefront of digital technology, and which attract top-quality international investment. Their position as pioneers in this new partnership with EPFL augurs well for the development of Industry 4.0 in our country.”
For more information and pictures, please see our press kit:
http://go.epfl.ch/DigitalTrustAnnouncement

Press contacts

Prof. Jean-Pierre Hubaux
Academic Director of the Center for Digital Trust
School of Computer and Communications Sciences
Tel. +41 (0)21 693 26 27
jean-pierre.hubaux@epfl.ch

Contact for partnerships with businesses and research institutions

Dr. Michaël Thémans
Deputy of the VP for Innovation
Tel. +41 (0)21 693 63 01
michael.themans@epfl.ch
https://people.epfl.ch/michael.themans?lang=en&cvlang=en