David Farber Prize for Student Essays on Cyber Civilization Call for Participation

The Cyber Civilization Research Center (CCRC) is calling on undergraduate students at Keio University to write essays in English, in the area of interaction between information technology and society. Best Papers will be awarded with certificates and prizes of up to ¥100,000. We particularly welcome those essays that contribute to our thinking in the following three themes the center is exploring:

Theme 1: The Implications of Connectivity on Civilization, Society, and the Self

Networked intelligence, unbound by physical limits and enhanced by key technological advancements, urges humanity to reconsider foundational concepts that have defined civilizations for centuries. For example, the notions of self, autonomy, and responsibility (that provide foundations for the design of many present day social institutions), are being questioned with the emergence of "thinking" machines that collectively function on the network. With such recognition, CCRC seeks to understand and develop the next generation of social principles to govern both the technology and society.

Theme 2: Virtual and Physical Infrastructural Security in a Connected Age

With the advances in IoT (Internet of Things) and AI (Artificial Intelligence), cyber civilization is becoming ever more vulnerable to cyber threats. Without addressing this issue, we will not be able to fully benefit from the promised capabilities of information technologies. By better understanding how pervasive technology has become to individual, national, and international security, we may be able to understand how to defend it from malicious actors and mitigate overspills from the virtual to the physical and vice versa.

Theme 3: Cyber Civilization Risks and Resilience

Beyond direct attacks on information technology systems, cyber civilization can also face a variety of civilization risks. Such risks may include unethical use of powerful technologies for weapons, social instability by loss of jobs, and loss of human control over markets, to name just a few. The consequences of natural born risks, including earthquakes, typhoons, tsunamis etc. would have different character and magnitude in the cyber civilization age from that of previous ones. CCRC thus seeks to explore civilization risks that are of a large magnitude and can risk both the virtual and physical manifestation of society. Based on the deeper understanding of the nature of the risks, we would also like to explore how technological and societal systems can be resilient, i.e. have the capability to recover from damages quickly, in a cyber civilization.

Application details are as follows:

- 1. Submission deadline: November 15, 2018
- 2. Word limit and format: The essay should be less than 3000 words in English. Please submit PDF.
- Publications: The center reserves the right to make the best paper publicly available in both the CCRC and KGRI (Keio Global Research Institute) homepages.
- 4. Submissions and Inquiries: prize@www.ccrc.keio.ac.jp