



Information Technology and Global Governance

INTERNATIONAL COLLEGE OF INNOVATION

108-1 (FALL SEMESTER 2019)
FRIDAY, 1:00-4:00 PM
RESEARCH BUILDING ROOM 250106



Course Objectives

1. To give an overview of the emergence of information technology and the notion of global governance.
2. To investigate various breakthrough technologies and understand as to how multiple structures govern them.
3. To analyse as to how stakeholders strive to determine the trajectory of information technology and govern them.
4. To explore as to how new structures are evolving to govern breakthrough technologies globally.



Course Outcomes

1. At the end of the semester the students would have a fair understanding of emerging technologies and ideas of global governance.
2. Students would be able to articulate their positions on information technology and global governance both in written and orally.



Meet the Professors

Dr. A. D. Gnanagurunathan



- Visiting Scholar, Department of Political Science, National Taiwan University (NTU), Taipei
- Head, Liberal Arts, at Apeejay Stya University (ASU), Gurgaon, Haryana, India
- Held research positions in leading think-tanks such as Indian Council of World Affairs (ICWA) under the Ministry of External Affairs, and Vivekananda International Foundation (VIF)
- Research interests: linkages between technology and international relations, India's engagement with East Asia, especially Japan, and concerns relating to federal and distributive politics and social justice in India



Dr. A. D. Gnanagurunathan

- Doctorate from the School of International Studies (SIS), Jawaharlal Nehru University (JNU), New Delhi
- Alumnus of prestigious Madras Christian College (MCC), Chennai

Prof. Kuo-Wei Wu 吳國維



- Board Member of ChungHwa Telecom (2016-2019)
- Taught at the Department of Computer Science in Kentucky Wesleyan College (1982-1984)
- Senior Programmer at Cray Research, Inc. (1984-1990)
- Developing Engineer at Multiflow Computer Corporation (1990-1998)
- Senior Vice President of Yam Digital, Inc. (1998-2000)
- Vice President of Acer, Inc. (2000-2003)
- CEO of National Information Infrastructure Enterprise Promotion Association (NIIEPA)(2004-2016)
- Board Member of NIIEPA (since 2016)



Prof. Kuo-Wei Wu 吳國維

- Involved in global, regional and national internet governance policy and issues since 1996
- Elected as Executive Council Member of Asia-Pacific Network Center (APNIC) (1999-2010)
- Invited as Board Member of Public Internet Registry (PIR)
- Elected as Board Member of Internet Corporation for Assigned Names and Numbers (ICANN) (2010-2016)

- Master of Computer Science from Columbia University in New York
- Master of Mathematical Science from University of Cincinnati
- Bachelor degree from Department of Mathematics at TungHai University

Dr. Yuh-Jong Hu 胡毓忠



- Full Professor, Department of Computer Science, NCCU
- Director, Computer Center, NCCU
- In charge of Emerging Network Technology (ENT) Lab, NCCU
- Honorary Professor, Institute of Telecom Engineering and Management, Amity University in India (August 11, 2017)
- Elected as Active Member, The New York Academy of Sciences (November 1993)
- Certified as a subject of biographical record in Marquis "Who's Who in the World" 12th ed. (1995)
- Accomplished several important works on software agent's trust, authentication, authorization, and delegation through digital certificates management in the Agent-Oriented Public Key Infrastructure (APKI)

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Dr. Yuh-Jong Hu 胡毓忠

Research Interests:

- semantic web technologies, including ontologies and rules for privacy-preserving data integration and access on the Web
- artificial intelligence/machine learning for big data analytics, deep reinforcement learning and its applications, and network security
- multi-agent software systems for intelligent decision making through deep reinforcement learning, optimizing portfolio management, intelligent security, privacy-preserving big data prediction and causal impact analytics, anomalous detection of business intelligent process, etc.
- multidisciplinary research on security and privacy protection from global governance, information technology, and legal perspectives



Dr. Yuh-Jong Hu 胡毓忠

- Ph.D. from Department of Computer Science, University of Missouri at Rolla (1987-1990)
- M.S. on Operations Research & System Analysis (ORSA), University of North Carolina at Chapel Hill (1982-1984)
- B.S. from Department of Applied Mathematics, National Chengchi University (1976-1980)



Dr. Yi-Ning Katherine Chen 陳憶寧



- Professor, Communication College, NCCU
- Research Interests: Mobile Communication, Political Communication, Science Communication...
- Courses taught: Statistics, Research Methods, Trends in Communication Industries...
- Served on Taiwan's NCC as National Communications Commissioner from August 2014 to July 2018
- Experience: Participated in international discussions with regulators, ISPs, and ICPs about false information, online piracy, net neutrality, peering, OTT regulations, The Right to be Forgotten (privacy), 5G applications, AI, IoT...

Dr. Yi-Ning Katherine Chen 陳憶寧

- Ph.D., Journalism, University of Texas at Austin, USA, 1999
- M.S., Journalism, National Chengchi University, Taiwan, 1996
- M.S., Plant Pathology, National Taiwan University, Taiwan, 1990
- B.S., Plant Pathology, National Taiwan University, Taiwan, 1988





Dr. Fu-Kuo Liu 劉復國



- Dean, International College of Innovation, NCCU
- Research Fellow, Institute of International Relations, NCCU
- Professor, International Doctor Program in Asia-Pacific Studies (IDAS), College of Social Science, NCCU
- Executive Director, Taiwan Center For Security Studies
- CEO, Association for Emerging Market Studies in Taipei
- Served as visiting researcher and/or faculty in the following institutions: University of Macau (2014), National Institute of South China Sea Studies, Haikou, China (2013-2015), US Department of State (2011), the Brookings Institution, Washington D.C. (2006-2007), School of Foreign Service, Georgetown University, Washington D.C. (2000-2001) and Aoyama Gakuin University, Tokyo, Japan (2001)



Dr. Fu-Kuo Liu 劉復國

- Professional experience: Commissioner in International Affairs Commission, Taipei City Government, Consultative Adviser in Mainland Affairs Council at the Ministry of Foreign Affairs (ROC) (2004-2007), and Chairman of Research and Planning Board at the Ministry of Foreign Affairs (ROC)
- Research interests: Comprehensive Security, Taiwan Foreign and Security Policy, Asia-Pacific Security, US Asia Policy, Non-traditional Security and National Security, Regionalism and Asia-Pacific Regional Integration, South China Sea Study and Maritime Security in Asia
- Ph.D., Politics, University of Hull, UK



Course Outline and Schedule

- Week 2 (9/20) Course Introductions
- Week 3 (9/27) United Nations and Global Governance (Prof. Wu)
- Week 4 (10/4) United Nations and Global Governance (Prof. Wu)
- Week 5 (10/11) Holiday
- Week 6 (10/18) Exploring Global Governance (Dr. Guru)
- Week 7 (10/25) Information Technology and Global Governance (Dr. Guru)
- Week 8 (11/1) AI and Global Governance (Prof. Hu)
- Week 9 (11/8) AI and Society (Prof. Hu)
- Week 10 (11/15) 5G and Global Governance (Dr. Guru)
- Week 11 (11/22) Autonomous Vehicles and Global Governance (Dr. Guru)
- Week 12 (11/29) Block Chain and Cryptocurrency (Dr. Guru)



Course Outline and Schedule

- Week 13 (12/6) GDPR's Global Impact on Privacy (Prof. Chen & Prof. Wu)
- Week 14 (12/13) Internet transactions, Internet Fragmentation and Infrastructure (Prof. Wu)
- Week 15 (12/20) Group Project Presentation
- Week 16 (12/27) National Security and Privacy in AI Era (Prof. Hu)
- Week 17 (1/3) Information Technology Governance and National Security (Prof. Liu)



Evaluation Criteria

- Class participation: 20
- Individual term paper: 30
- Group term paper with presentation: 50



COURSE READINGS

Available on Moodle

<http://moodle.nccu.edu.tw/>

or log-in to <https://i.nccu.edu.tw/>
☐home page ☐Moodle

TEACHING ASSISTANT

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