



PRIVACY AND SECURITY IN ONLINE SOCIAL MEDIA

PROF. PONNURANGAM KUMARAGURU

Department of Computer Science and Engineering
IIIT Delhi

TYPE OF COURSE : Rerun | Elective | UG/PG

COURSE DURATION : 12 weeks (23 Jan 23 to 14 Apr 23)

EXAM DATE : April 29, 2023

PRE-REQUISITES : Basic / Intermediate programming course. Understanding of Python will be necessary for the course. Should be able to quickly learn APIs, and to collect data from social networks.

INTENDED AUDIENCE : Interested students

INDUSTRIES APPLICABLE TO : Any company which is interested in social media / networks data will be interested in recruiting the students finishing the course.

COURSE OUTLINE :

With increase in the usage of the Internet, there has been an exponential increase in the use of online social media and networks on the Internet. Websites like Facebook, YouTube, LinkedIn, Twitter, Flickr, Instagram, Google+, FourSquare, Pinterest, Tinder, and the likes have changed the way the Internet is being used. However, widely used, there is a lack of understanding of privacy and security issues on online social media. Privacy and security of online social media need to be investigated, studied and characterized from various perspectives (computational, cultural, psychological, etc.). Student completing the course will be able to appreciate various privacy and security concerns (spam, phishing, fraud nodes, identity theft) on Online Social Media and Student will be able to clearly articulate one or two concerns comprehensively on one Online Social Media, this will be achieved by homework.

ABOUT INSTRUCTOR :

Ponnurangam Kumaraguru, Associate Professor, is currently the Hemant Bharat Ram Faculty Research Fellow at the Indraprastha Institute of Information Technology (IIIT), Delhi, India. PK is the Founding Head of Cybersecurity Education and Research Centre (CERC). PK is one of ACM India Eminent Speakers. He received his Ph.D. from the School of Computer Science at Carnegie Mellon University (CMU). His research interests include Privacy, e-Crime, Online Social Media, and Usable Security, in particular, these days he has been dabbling with complex networked systems (e.g. social web systems like Twitter, Facebook, and telephone logs). Government of India has been funding PK for the last 6 years for studying Online Social Media, he manages research projects of about 2 Crores INR. PK has received research funds from Government of India, National Science Foundation (NSF), USA, industry bodies in India, and International funding agencies.

COURSE PLAN :

Week 1: What is Online Social Networks, data collection from social networks, challenges, opportunities, and pitfalls in online social networks, APIs

Week 2: Collecting data from Online Social Media.

Week 3: Trust, credibility, and reputations in social systems

Week 4: Trust, credibility, and reputations in social systems, cont'd

Week 5: Online social Media and Policing

Week 6: Information privacy disclosure, revelation and its effects in OSM and online social networks

Week 7: Phishing in OSM & Identifying fraudulent entities in online social networks

Week 8: Refresher for all topics

Week 9 to 12 : Research paper discussion