Fake Content, Manipulated Accounts, Chatbots, and Kill Files on Social Media

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Abstract: With increase in usage of the Internet, there has been an exponential increase in the use of online social media on the Internet. Websites like Facebook, Instagram, Twitter, Tinder, YouTube, and many others have changed the way the Internet is being used. There is a dire need to investigate, measure, and understand privacy and security on online social media from various perspectives (computational, cultural, psychological). Real world scalable systems need to be built to detect and defend security and privacy issues on online social media. I will describe briefly some cool projects that we work on: (Mis)Information / Fake content on Twitter, Facebook, and WhatsApp; Linking profiles across different social networks; Selfie deaths and KillFies; and Manipulated followers. Many of our research work is made available for public use through tools or online services at precog.iiitd.edu.in including datasets that we have used in our research work. Our work derives techniques from Computational Social Science, Data Science, Statistics, and Network Science. I will be more than happy to clarify, discuss, any of our work in detail, as required, after the talk.

Bio: Prof. Ponnurangam Kumaraguru ("PK") is an Associate Professor of Computer Science and Associate Dean of Students Affairs at IIIT-Delhi. He is an Adjunct faculty at IIIT Hyderabad. PK is a TEDx and an ACM Distinguished & ACM India Eminent Speaker. PK received his Ph.D. from the School of Computer Science at Carnegie Mellon University (CMU). His Ph.D. thesis work on anti-phishing research at CMU contributed in creating an award-winning startup - Wombat Security Technologies, wombatsecurity.com. Wombat was acquired in March 2018 for USD 225 Million. In addition to his contributions to academia, PK is on advisory role on various government organizations and a Fortune 500 company. He is also part of various Board of Studies of different academic institutes across the country. He has co-authored research papers in the field of Privacy and Security in Online Social Media, Cyber Security, Computational Social Science, Social Computing, Data Science for Social Good, amongst others. He is passionate about solving societal problems using technologies, especially contributing to the domain of social computing. PK and his students have played an integral role in developing a technology used many State and Central Government agencies in India. He has spent time making notable contributions at organizations like IBM India Research Labs, Adobe Research Labs – India, Universidade Federal de Minas Gerais (UFMG) – Brazil, and Max Planck Institute for Software Systems – Germany. PK has served as a Program Committee member at prestigious conferences like WWW, CHI, PETs, ICWSM, CSCW, AsiaCCS. He was the Founding Head of Cybersecurity Education and Research Centre (CERC) at IIIT-Delhi. PK started and successfully manages PreCog (precog.iiitd.edu.in), a research group at IIIT-Delhi.