DEMYSTIFYING NETWORKING

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TYPE OF COURSE : Rerun l Elective UG/PG
COURSE DURATION : 4 weeks (20 Jul’20 - 14 Aug’20)
EXAM DATE : 27 Sep 2020

INTENDED AUDIENCE : Computer Networking
INDUSTRIES APPLICABLE TO : Computer Networks

COURSE OUTLINE :
This course will provide students with an overview of networking concepts and technologies. It is meant as a primer for non-majors, i.e., for students who don’t have networking as a core course in their curriculum. After this primer, students may choose to take other networking courses for delving deeper into specific technologies

ABOUT INSTRUCTOR :
Prof. Sridhar Iyer is a faculty member in the Inter-Disciplinary Program in Educational Technology, and Department of Computer Science and Engineering at IIT Bombay. His current research interests include: Technology Enhanced learning Environments for Thinking skills, Pedagogies for effective use of Educational Technologies, and Computer Science Education Research. Prof. Sridhar Iyer received his B,Tech, M,Tech and Ph,D from the Department of Computer Science and Engineering at IIT Bombay.

COURSE PLAN :
Week 1 : Layering analogy Protocols, Top down view, Bottom up view, Issues at each layer, Mobile Networks
Week 2 : MAC analogy, MAC concepts Example - Ethernet Example - WiFi Example – 3G Mobile – 3G/4G
Week 3 : Routing analogy Routing concepts Example – RIP/OSPF Transport concepts Example – UDP/TCP Mobile - Roaming
Week 4 : Applications overview Client-Sever Example – Web Example – Streaming Cloud services Mobile - Apps