

This schedule and syllabus is tentative and subject to change. Any updates will be announced on piazza.

Class time: Tue/Thu 9:30-11:00am

Zoom info for the class:

<https://berkeley.zoom.us/j/99425725519?pwd=L29VN2pJRkhza3BLditRbzUwWU1ydz09>

Meeting ID: 994 2572 5519

Passcode: 050048

Date	Topic	Required Reading	Presenter(s)	Notes
Jan 19	Overview	-	Sylvia	Optional: Turing
Jan 21	Classics: Internet arch.	Design	Sylvia	Optional: E2E , Tussles
Jan 26	Classics: Beyond best-effort	Active , QoS	Sylvia	Optional: Debate
Jan 28	Classics: Beyond unicast	Mcast , Overlays	Sylvia	Optional: Deering SprintExperience s
Feb 2	Congestion Control	VanCC , XCP	Arjun Mishra (VanCC) Avik Jain (XCP)	Optional: RCP
Feb 4	Data Centers	VL2 , Ananta	Dave Maltz (Microsoft)	
Feb 9	DC Topologies	FatTree , Jelly	Nidhi K. (FatTree) Shishir Patil (JellyFish)	Optional: NetSpam
Feb 11	Measurement	pktDyn , Azure19	Sarah McClure (pktDyn) Max Yao (Azure19)	
Feb 16	DC Transports	DCTCP , RDMA	Jitu Padhye (Microsoft)	
Feb 18	Interdomain routing	RCP , Consensus	Michael P. (RCP) Saurav C. (Consensus)	Optional: BGP , GR
Feb 23	SDN	Ethane , ONIX	Hanming (Ethane) Eric Chen (ONIX)	Optional: McKeown , Shenker , OF , Road , Retrospective ,

				4D
Feb 25	Prog. switches	RMT , NetCache	Chang Kim (Barefoot/Intel)	Optional: P4
Mar 2	Network SW	Click , RB	Aditya S. (Click) Yiheng (RB)	Optional: DPDK
Mar 4	NFV	Aplomb , SNF	Richard Lin (Aplomb) Narek Galstyan (SNF)	Optional: FTMB
Mar 9	Low-latency	Shenango , mTCP	Amy Ousterhout (UCB!)	Killer-usecs
Mar 11	P2P	DHT , BitTyrant	Yudi Tan (DHT) Michael Zhang (BitTyrant)	Optional: Geom
Mar 16	Taming buffers	Sizing , BBR	Sylvia (Sizing) Ziyao Zhang (BBR)	Optional: Harm , GSR
Mar 18	Smart NICs	iPipe , flexNIC	Arvind Krishnamurthy (UW)	
Mar 23	SPRING BREAK			
Mar 25	SPRING BREAK			
Mar 30	Disaggregation	NetDis , Shoal	Rachit Agarwal (Cornell)	
Apr 1	Miscellaneous	NDP , Space1	Zizheng (NDP) Aditya R. (Space1)	
Apr 6	Societal issues	Feudalism , LoneOp	Jay Chen (ICSI)	
Apr 8	Networking at scale	B4 , FlatInternet	Bikash Koley (Google)	Optional: Espresso , Malt
Apr 13	Network evolution	POC , [see @49 on piazza]	Scott Shenker (UCB!)	
Apr 15	New WAN transports	Multipath , CellBricks (see @51 on piazza)	Yichi Z. (Multipath) Sylvia (CellBricks)	Optional: PCC
Apr 20	Verification	HSA , Minesweeper	Xuantong Liu (HSA) Vishal Satish (Minesweeper)	Optional: reflections

Apr 22	New directions	<p>Keynote by 2020 winner of the SIGCOMM lifetime achievement award: Vahdat</p> <p>A collection of position papers, old and new: NoFair, Throwdown, Orbit-HotNets20, NetFast-HotNets19 NoNets-HotOS21 Cloudless-HotOS21</p>	Sylvia	
Apr 27	Project Presentations		-	
Apr 29	Project Presentations		-	