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- [19] N. Larson, D. Baltrunas, A. Kvalbein, A. Dhamdhere, k. claffy, and A. Elmokashfi, "Investigating Excessive Delays in Mobile Broadband Networks," in *Proc. of the Workshop on All Things Cellular (AllThingsCellular)*, 2015.
- [20] P. Sun, M. Yu, M. J. Freedman, and J. Rexford, "Identifying Performance Bottlenecks in CDNs Through TCP-level Monitoring," in *Proc. ACM SIGCOMM Workshop on Measurements Up the Stack (W-MUST)*, 2011.
- [21] D. Katabi, M. Handley, and C. Rohrs, "Congestion Control for High Bandwidth-Delay Product Networks," *ACM SIGCOMM Computer Communication Review*, 2002.
- [22] M. Caesar, D. Caldwell, N. Feamster, J. Rexford, A. Shaikh, and J. van der Merwe, "Design and Implementation of a Routing Control Platform," in *USENIX NSDI*, 2005.
- [23] M. Dong, Q. Li, D. Zarchy, P. B. Godfrey, and M. Schapira, "PCC: Re-architecting Congestion Control for Consistent High Performance," in *NSDI*, 2015.
- [24] V. Srivastava and M. Motani, "Cross-layer Design: A Survey and the Road Ahead," *IEEE Communication Magazine*, vol. 43, no. 12, 2005.
- [25] B. Fu, Y. Xiao, H. J. Deng, and H. Zeng, "A Survey of Cross-Layer Designs in Wireless Networks," *IEEE Communications Surveys Tutorials*, vol. 16, no. 1, 2014.
- [26] R. Kateja, N. Baranasuriya, V. Navda, and V. N. Padmanabhan, "DiversiFi: Robust Multi-Link Interactive Streaming," in *ACM CoNEXT*. ACM, 2015.
- [27] N. Baranasuriya, V. Navda, V. N. Padmanabhan, and S. Gilbert, "QProbe: Locating the Bottleneck in Cellular Communication," in *CoNEXT*, 2015.
- [28] T. Flach, N. Dukkipati, A. Terzis, B. Raghavan, N. Cardwell, Y. Cheng, A. Jain, S. Hao, E. Katz-Bassett, and R. Govindan, "Reducing Web Latency: The Virtue of Gentle Aggression," in *ACM SIGCOMM*, 2013.
- [29] 3GPP, "LTE: Evolved Universal Terrestrial Radio Access (E-UTRA); Physical channels and modulation," *TS 36.211 version 12.3.0 Release 12*, 2014.
- [30] N. Bui and J. Widmer, "OWL: A Reliable Online Watcher for LTE Control Channel Measurements," in *Proceedings of the 5th Workshop on All Things Cellular: Operations, Applications and Challenges*, 2016.
- [31] 3GPP, "LTE: Evolved Universal Terrestrial Radio Access (E-UTRA); Physical layer procedures," *TS 36.213 version 12.4.0 Release 12*, 2015.
- [32] Y. Li, C. Peng, Z. Yuan, J. Li, H. Deng, and T. Wang, "MobileInsight: Extracting and Analyzing Cellular Network Information on Smartphones," in *ACM MobiCom*, 2016.
- [33] "The Apache HTTP Server Project." [Online]. Available: <https://httpd.apache.org/>
- [34] IETF HTTP Working Group, "HTTP/2 Wiki." [Online]. Available: <https://github.com/http2/http2-spec/wiki/Ops>
- [35] Yasir Zaki, "Verus Source Code on GitHub." [Online]. Available: <https://github.com/yzaki/verus/>
- [36] Google, "Remote Debugging Android Devices." [Online]. Available: <https://developers.google.com/web/tools/chrome-devtools/debug/remote-debugging/remote-debugging?hl=en>
- [37] R. Netravali, A. Goyal, J. Mickens, and H. Balakrishnan, "Polaris: Faster Page Loads Using Fine-grained Dependency Tracking," in *USENIX NSDI*, 2016.
- [38] Y. Zhu, M. Halpern, and V. J. Reddi, "Event-Based Scheduling for Energy-Efficient qos (eqos) in Mobile Web Applications," in *2015 IEEE 21st International Symposium on High Performance Computer Architecture (HPCA)*. IEEE, 2015.
- [39] X. Li and Z. Bao, "Performance Characterization of Web Applications with HTML5 Enhancements," in *Dependable, Autonomic and Secure Computing (DASC), 2014 IEEE 12th International Conference on*. IEEE, 2014.
- [40] J. Gettys and K. Nichols, "Bufferbloat: Dark Buffers in the Internet," *Communications of the ACM*, vol. 55, no. 1, 2012.
- [41] M. Carbone and L. Rizzo, "Dummynet revisited," in *ACM SIGCOMM Computer Communication Review*, 2010.
- [42] Alexa. [Online]. Available: <http://www.alexa.com/>
- [43] U. Hengartner, J. Bolliger, and T. Gross, "TCP Vegas Revisited," in *INFOCOM 2000*, 2000.
- [44] 3GPP, "LTE UE-Category." [Online]. Available: <http://www.3gpp.org/keywords-acronyms/1612-ue-category>
- [45] Qualcomm, "Snapdragon 800 Processor." [Online]. Available: <https://www.qualcomm.com/products/snapdragon/processors/800>
- [46] ———, "Snapdragon 808 Processor." [Online]. Available: <https://www.qualcomm.com/products/snapdragon/processors/808>
- [47] A. Jain, A. Terzis, N. Sprecher, S. Arunachalam, K. Smith, and G. Klas, "Requirements and reference architecture for Mobile Throughput Guidance Exposure," 2015. [Online]. Available: <https://tools.ietf.org/html/draft-flinck-mobile-throughput-guidance-03>
- [48] J. Huang, F. Qian, A. Gerber, Z. M. Mao, S. Sen, and O. Spatscheck, "A close examination of performance and power characteristics of 4g lte networks," in *ACM MobiSys*, 2012.
- [49] J. Nejati and A. Balasubramanian, "An In-Depth Study of Mobile Browser Performance," in *Proceedings of the 25th International Conference on World Wide Web*. International World Wide Web Conferences Steering Committee, 2016.
- [50] Google, "Accelerated Mobile Pages (AMP)." 2016. [Online]. Available: <https://www.ampproject.org>