IEEE Journal on Selected Areas in Communications (JSAC)

Start Date of Review/Analysis: Jan. 2005; Analyst: Lei Shi

2010
April: Special Issue on "Wireless Video Transmission", missing

March: No Publication

February: Special Issue on "Data Communication Techniques for Storage Channels and Networks", missing

January: Special Issue on "Recent Advances in Autonomic Communications", missing

2009
December: Special Issue on "Optical Wireless Communications"

November: No Publication

October: Special Issue on "Realizing GBPS Wireless Personal Area Networks"

September: Special Issue on "Stochastic Geometry and Random Graphs for the Analysis and Design of Wireless Networks"

August: Special Issue on "Capacity Approaching Codes", missing

July: No Publication

June: Special Issue on "Network Coding for Wireless Communication Networks"

May: Special Issue on "Wireless and Pervasive Communications for Healthcare"

April: Special Issue on "Network Infrastructure Configuration"

March: No Publication

February: Special Issue on "Broadband Access Networks: Architectures and Protocols"
- "Convergence of Ethernet PON and IEEE 802.16 Broadband Access Networks and its QoS-Aware Dynamic Bandwidth Allocation Scheme" by K. Yang, S. Ou, K. Guild, and H. – H. Chen: DBA issue in WOBAN type of network. For Pulak and Sayeem.
- "Capacity and Delay of Hybrid Wireless Broadband Access Network" by P. Li, C. Zhang and Y. Fang: talks about capacity and delay characteristics in multi-hop WOBAN type of network. For Pulak and Sayeem.
- "Architecture to Integrated Multiple PONs with Long Reach DWDM Backhaul" by D. P. Shea and J. E. Mitchell: A LR-PON Demonstration. For Lei Shi.
- "Multi-Thread Polling: A Dynamic Bandwidth Distribution Scheme for Long-Reach PON" by H. Song, B. – W. Kim, and B. Mukherjee: Multi-Thread Polling scheme in LR-PON. For Lei Shi.

January: Special Issue on "Body Area Networking: Technology and Applications"

2008
December: Special Issue on "Underwater Wireless Communication Networks"

November: No publication.

October: Special Issue on "Exploiting Limited Feedback in Tomorrow's Communication Networks"

September: Special Issue on "Game Theory in Communication Systems"

August: Special Issue on "Mimo Systems and Applications: Field Experience, Practical Aspects, Limitations and Challenges"

August: Supplement on Optical Communication and Networking
- "Africa TWO: A Proposal for a Concentric Two-Ring Network for the African Continent" by A. Huang, S. Sarkar, and B. Mukherjee: proposes a robust network while tolerating traffic imbalance.
- "Hybrid Wireless-Optical Broadband Access Network (WOBAN): Network Planning and Setup" by S. Sarkar, H. – H. Yen, S. Dixit, and B. Mukherjee: First paper of WOBAN. For Pulak and Sayeem.
- "Elastic Service Availability: Utility Framework and Optical Provisioning" by D. Xu, Y. Li. M. Chiang, and A. R. Calderbank: develops a utility function with configurable parameters to represent the satisfaction perceived by a user upon service availability and allowed source rate. For anyone doing service related stuff.
- "On The Study of Multiple Backups and Primary-Backup Link Sharing for Dynamic Service Provisioning in Survivable WDM Mesh Network" by L. Song and B. Mukherjee: reports a mathematical model to quantify a connection's availability with N backup paths with k-link sharing between primary and backup. For Menglin.

July: No Publication

June: Special Issue on "Delay and Disruption Tolerant Wireless Communication Systems", missing

May: Special Issue on "Control and Communications"

April: Special Issue on "Multiuser Detection for Advanced Communication Systems and Networks"

April: Supplement on Optical Communications & Networking
- "Holding-Time-Aware Dynamic Traffic Grooming" by M. Tornatore, A. Baruffaldi, H. Zhu, B. Mukherjee and A. Pattavina: reports a new scheme using knowledge like connection holding time to improve routing efficiency. For people working on core network.
- "On Provisioning in Dual-Node Interconnected SONET/SDH Rings" by S. Rai, C. – F. Su, T. Hamada, and B. Mukherjee: examines a network of inter-connected SONET/SDH Rings that use dual node interconnection employing the drop-and-continue facility and develop provisioning algorithm.
- "Quasi-Dynamic Network Design Considering Different Service Holding Time" by K. Kanie, H. Hasegawa and K.- I. Sato: proposes a quasi-dynamic network design algorithm considering traffic growth in multi-layered networks that consist of electrical and optical paths. For Lei Shi.

March: No Publication

February: Special Issue on "Equalization Techniques for Wireless Communications - Theory & Aapplications"

January: Special Issue on "Cognitive Radio: Theory and Application"

2007
December: Special Issue on "Advances in Peer-to-Peer Streaming Systems"

December: Supplement on Optical Communications & Networking
- "Achieving Shared Protection for Dynamic Multicast Sessions in Survivable Mesh WDM Networks" by H. Luo, L. Li, H. Yu, and S. Wang: proposes a protection scheme for resource efficient multicast protection with spare capacity sharing. For people working on protection.

November: Special Issue on ""
October: Special Issue on "Vehicular Networks"

September: Special Issue on "Optimization of MIMO Transceivers", missing

August: Special Issue on "Non-Cooperative Behavior in Networking"

July: Special Issue on ""
June: Special Issue on "Traffic Engineering for Multi-Layer Networks"
- "Towards Robust Multi-Layer Traffic Engineering: Optimization of Congestion Control and Routing" by J. He, M. Bresler, M. Chiang, and J. Rexford: reports multi-layer interaction of congestion control and routing under two models. For core network people.
- "Spare Capacity Allocation in Two-Layer Network" by Y. Liu, D, Tipper and K. Vajanapoom: reports the problem of provisioning spare capacity in two-layer backbone networks using shared backup path protection. For core network people.

May: Special Issue on "Cross-Layer Optimized Wireless Multimedia Communications", missing

April: Special Issue on "Adaptive, Spectrum Agile, and Cognitive Wireless Networks", missing

March: No Publication

February: Special Issue on "Cooperative Communications and Networking"

January: Special Issue on "Peer-to-Peer Communications and Applications"

2006
December: Special Issue on "Sampling The Internet: Techniques and Applications"

December: Supplement on Optical Communications & Networking

- "On the Throughput and Fairness Performance of TCP over Ethernet Passive Optical Networks" by K. – C. Chang and W. Liao: calculates the max aggregate throughput of TCP flows of EPON and derives tight bound. For Lei Shi.

November: Special Issue on "Multihop Wireless Mesh Networks"

October: Special Issue on "High-speed Network Security - Architechture, Algorithms, and Implementation"

September: Special Issue on "Mobile Routers and Network Mobility"

August: Special Issue on "Nonlinear Optimization of Communication Systems"
- "A Tutorial on Decomposition Methods for Network Utility Maximization" by D. P. Palomar and M. Chiang: reports a systematic understanding of the decomposability structures using convexity Lagrange duality, distributed subgradient method, Jacobi and gauss-seidel iterations; seems like related to Dragos's work.
- "A Tutorial on Cross-Layer Optimization in Wireless Networks" by X. Lin, N. B. Shroff, and R. Strikant: talks about resources allocation problem in wireless network. For Sayeem.
- "Layered Multicast Rate Control Based on Lagrangian Relaxation and Dynamic Programming" by K. Kar and L. Tassiulas: talks about throughput/fairness issue in multicast network. related to Dragos's work.
- "Distributed Nonlinear Integer Optimization for Data-Optical Internetworking" by A. Elwalid, D. Mitra, and Q. Wang: reports a novel approach for joint optical network provisioning and IP traffic engineering, aimed at optimizing network performance and lightpath provisioning cost. For core network people.

August: Supplement on Optical Communication & Networking
- "Efficient Multi-Layer Operational Strategies for Survivable IP-over-WDM Networks" by K. Ratnam, L. Zhou, and M. Gurusamy: talks about balancing between acceptable call acceptance rate, satisfying protection requirements of requests, and controlling the signaling overhead. For core network people.
- "Fair Sharing Using Dual Service-Level Agreements to Achieve Open Access in a Passive Optical Network" by A. Banerjee, G, Kramer, and B. Mukherjee: reports how to meet fairness requirements simultaneously to both service providers and users, and investigates the importance of dual SLAs. For Lei Shi, Pulak.
- "Backup Reprovisioning to Remedy the effect of Multiple Link Failures in WDM Mesh Networks" by J. Zhang, K. Zhu, and B. Mukherjee: considers dynamic traffic where backup reprovisioning can be performed whenever the network state changes. For core network people.

July: Special Issue on "Power Line Communications"

June: Special Issue on "Advances In Multicarrier CDMA"

May: Special Issue on "Price-Based Access Control & Economics for Communication Networks"

April: Special Issue on "Ultra-Wideband Wireless Communications - Theory and applications"

April: Part II: Optical Communications & Networking
- "Design and Provisioning of WDM Networks with Multicast Traffic Grooming" by R. Ul-Mustafa and A. E. Kamal: describes a WDM network for multicast purpose. <mark>For core network people who may interested in multicast.</mark>

March: Special Issue on "4G Wireless Systems"

February: Special Issue on "Security in Wireless Ad Hoc Networks"

January: Special Issue on "Next-Generation CDMA Technologies"

2005
December: Special Issue on "Autonomic Communication Systems"

November: Special Issue on "Wireless Overlay Networks Based on Mobile IPv6"

October: Special Issue on "Recent Advances in Managing Enterprise Network Services"

September: Special Issue on "Differential and Noncoherent Wireless Communications"

August: Special Issue on "Optical Communications and Networking Series"
- "QoS Control Schemes for Two-Stage Ethernet Passive Optical Networks" by A. Shami, X. Bai, N. Ghani, C. M. Assi, and H. T. Mouftah: new EPON architecture that allows more users to share an optical line terminal link and enables longer access reach/distances. <mark>For Lei Shi.</mark>

July: Special Issue on "Nanotechnologies for Communications"

June: Special Issue on "Mobile Computing and Networking"

May: Special Issue on "Advances in Military Communications"

April: Special Issue on "Self-Organizing Distributed Collaborative Sensor Networks"

March: Special Issue on "Wireless Ad Hoc Networks - Part II"

February: Special Issue on "Intelligent Services and Applications in Next-Generation Networks"
- "An Adaptive Cross-Layer Scheduler for Improved QoS Support of Multiclass Data Services on Wireless System" by K. B. Johnsson and D. C. Cox: <mark>could be of Avishek's interest even though this one is on wireless side.</mark>

January: Special Issue on "Wireless Ad Hoc Networks - Part I"