Networking for Multimedia Paper Reviews

Paper 1: A. Garyfalos and K. Almeroth, "Coupons: A Multilevel Incentive Scheme for Information Dissemination in Mobile Networks", *IEEE Trans. on Mobile Computing*, vol. 7, no. 6, June 2008.

Familiarity: Novice

Recommendation: Likely accept

Strengths:

- Fairly complete concept comprising a novel problem defining a new area and an associated solution, along with metrics.
- Good writing and content organization—support leading up to system description was especially strong
- Extensive work and dataset, covering both simulation and implementation testbed.

Weaknesses:

- Exploration of the concept as a platform for other applications to build upon could be expanded
- Integration of nodal behavior without network access was mentioned but not explored
- Small number of grammatical errors, but not enough to detract from the work.

Detailed Comments: In general, good use of the "define, evaluate and implement" theme throughout the paper. The "coupons" notion was immediately clear but motivation beyond this somewhat specific application was not obvious, given that the intention was to describe a generic framework. Section 4 bordered on repetitive results but the novel metrics employed mitigated this. It was unclear (perhaps this is the reviewer not being in step with this research area) why the implementation testbed focused on laptops in a WLAN—the rest of the paper, including the simulations, seemed to imply the mobility models of PDA and/or cell phone-based applications; a proof of concept testbed exploring how such a platform might actually be deployed may have made more sense. The behavior of nodes which come in to contact with one another while network access is limited or unavailable was touched upon but only briefly. This is an interesting notion with real ramifications and could be considered in further detail.

Paper 2: R. Chalmers and K. Almeroth, "Developing a Multicast Metric", *Proceedings of the IEEE Global Telecommunications Conference (GLOBECOM '00)*, Dec. 2000.

Familiarity: Novice

Recommendation: Likely accept

Strengths:

- Strong development and support for novel evaluations without new problems or solutions
- Simplicity and immediate apparent effectiveness of the proposed metrics is evident and makes for an elegant paper overall
- Good storytelling: it was clear throughout what we were doing and why; the argument of necessity for the paper was compelling

Weaknesses:

- Section 6, "Predictive Metrics", could have used a bit more support, particularly background and/or motivation (for the outsider reviewer) for exploring multicast tree shape.
- Clearer reasoning for why the proposed concept addressed insufficiencies in other closely related, previously proposed multicast metrics may have made the paper somewhat stronger.

Detailed Comments: The choice of paper organization in the absence of directly describing a "new" research problem was intriguing. This certainly could have been a survey-type paper detailing all the issues with taking multicast metrics and then some suggestions tacked on to the end. However, the net effect of instead making the proposed metrics the centerpiece and *then* describing why such a concept was difficult was positive. The use and citation of the authors' previous work was well-executed and went nicely with the flow of the story. The work was overall stylistically effective and accessible. Whenever there is such an in-depth future work section, particularly coupled with the lack of results in the paper, one can't help but wonder why the metric was not employed in some canned network testbeds, or even the consideration of simulated efficiency.