Term Papers — Spring 1999
332:519 Game Theory with Applications to Communications, Networking, and Control

Communications/Networking Students:

1. D. Kataria: "A Game Theoretic Approach to Flow Control in Telecommunication Networks," by C. Douligeris and R. Mazumdar, *Journal of the Franklin Institute*, Vol. 329, 383–402, 1992.
2. W. Wang: "Non-Cooperative Uplink Power Control in Cellular Radio Systems," by H. Ji and C-H. Huang, *Wireless Networks,* Vol. 4, 233–240, 1998.
3. W. Yuen: "Power Control for Wireless Data Based on Utility and Pricing," by V. Shah, N. Mandayam, and D. Goodman, Technical Report WINLAB-TR-159, May 1998.
4. W. Wei: "Competitive Routing in Multiuser Communication Networks," by A. Orda, R. Rom and N. Shimkin, *IEEE/ACM Transactions on Networking*, Vol. 1, 510–521, 1993.
5. A. Pinheiro: "Stochastic Diffeential Games with Imperfect State Estimators," by I. Rhodes and D. Luenberger, *IEEE Transactions on Automatic Control*, Vol. AC-14, 29–38, 1969.
6. A. Francu: "Achieving Network Optima Using Stackelberg Routing Strategies," by Y. Korilis, A. Lazar, and A. Orda, *IEEE/ACM Transactions on Networking*, Vol. 5, 161–173, 1997.

Control Students:

1. J. Gudgeirsson: "Recursive Solution of Linear-Quadratic Nash Games for Weakly Interconnected Systems," by B. Petrovic and Z. Gajic, *Journal on Optimization Theory and Applications*, Vol. 56, 463–477, 1988.
2. D. Popescu: "Feedback and Well-Posedness of Singularly Perturbed Nash Games," by H. Khalil and P. Kokotovic, *IEEE Transactions on Automatic Control*, Vol. AC-24, 699–708, 1979.
3. O. Popescu: "Closed-Loop Stackelberg Strategies for Singularly Perturbed Systems: The Recursive Approach," K. Mizukami and F. Suzumura, *International Journal of Systems Science*, Vol. 24, 887–900, 1993.
4. L. Qian, "On the Existence of Stabilizing Solutions of the Algebraic Riccati Equations of Linear-Quadratic Dynamic Nash Feedback Strategies" by Z. Gajic and T-Y. Li, paper in progress.
5. O. Velgorsky, "Further Analysis of the Braess Paradox" (supplementary reading: Y. Korilis, A. Lazar, and A. Orda, "Avoiding Braess Paradox in Noncooperative Networks," June 1997).
6. S. Lei: "Multi-user Based Flow Control," by E. Altman and T. Basar, *IEEE Transactions on Automatic Control*, Vol. AC-46, 940–949, 1998.

Presentation of papers is scheduled for May 12, 1999, 6:30–9:20, ELE 240.