

# Clayton W. Commander

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## Education

- ◇ **University of Florida, Gainesville, FL**

**Doctor of Philosophy (Ph.D.) in Operations Research, August 2007**

Department of Industrial and Systems Engineering

GPA: 3.95/4.0

Dissertation Title: *Optimization Problems in Telecommunications with Military Applications*

Advisor: Dr. Panos M. Pardalos

**Master of Science in Operations Research, December 2005**

Department of Industrial and Systems Engineering

GPA: 3.9/4.0

Advisor: Dr. Panos M. Pardalos

**Bachelor of Science in Mathematics with Highest Honors, May 2003**

GPA: 3.95/4.0, Math GPA: 4.0/4.0

Thesis Title: *A Survey of the Quadratic Assignment Problem, with Applications*

Thesis Advisor: Dr. Panos M. Pardalos

- ◇ **Bryn Mawr College, Bryn Mawr, PA**

**Premedical Postbaccalaureate Program, May 2008 - Present**

GPA: 4.0/4.0

## Professional Experience

- ◇ **May 2003 – May 2008, United States Air Force (CIV), Eglin AFB, FL**

**Computer Scientist - Air Force Research Laboratory (08/05 - 05/08)**

Active member of basic research team in the Navigation and Controls branch. Researching and developing high-level algorithms for optimization problems in telecommunications. Principal investigator and writer of numerous grant proposals.

**Computer Scientist - 96<sup>th</sup> Communications Group (05/03 - 08/05)**

Supported the development and testing of state-of-the-art smart weapon systems using modeling and simulation, network management, high performance computing, and direct test and evaluation support of munitions and Command and Control systems in a CMM Level 5 organization.

- ◇ **August 2007 – May 2008, Okaloosa-Walton College, Niceville, FL**

**Adjunct Assistant Professor**

*Spring 2008* – Teaching preparatory algebra to undergraduates. Course content includes operations with real numbers, properties of real numbers, linear equations and equalities, rational expressions and equations, properties of exponents, polynomials, radical expressions, and graphs of lines.

### Mathematics Tutor

Fall 2007 – Provide tutorial assistance for all levels of mathematics from preparatory algebra to multi-variable calculus and ordinary differential equations.

### ◇ August 2008 – Present, Bryn Mawr College, Bryn Mawr, PA

#### Physics Tutor

Tutoring postbaccalaureate premedical students in college physics.

## Publications

### ◇ Books Edited

1. *Sensors: Theory, Algorithms, and Applications*. Vladimir Boginski, Clayton W. Commander, Panos M. Pardalos, and Yinyu Ye, (eds.), Springer Series on Optimization and Its Applications, Springer 2009. (in preparation)
2. *Optimization and Cooperative Control Strategies*. Clayton W. Commander, Michael J. Hirsch, Robert A. Murphey, and Panos M. Pardalos (eds.), Lecture Notes in Control and Information Systems, Vol. 381, Springer 2009. (Available March 6, 2009)

### ◇ Papers in Refereed Journals and Books

1. Vladimir Boginski, Clayton W. Commander and Timofey Turko. Polynomial-Time Identification of Robust Network Flows Under Uncertain Arc Failures. *Optimization Letters*, submitted, November 2008.
2. Ashwin Arulselvan, Clayton W. Commander, Lily Elefteriadou, and Panos M. Pardalos. Detecting Critical Nodes in Sparse Graphs. *Computers and Operations Research*, in press, 2008. (DOI doi:10.1016/j.cor.2008.08.016)
3. Clayton W. Commander and Panos M. Pardalos. A Combinatorial Algorithm for the TDMA Message Scheduling Problem. *Computational Optimization and Applications*, in press, 2008. (DOI 10.1007/s10589-007-9143-8)
4. Vladimir Boginski and Clayton W. Commander. Identifying Critical Nodes in Protein-Protein Interaction Networks. S.I. Butenko, W.A. Chaovilitwongse, and P.M. Pardalos (editors), *Clustering Challenges in Biological Networks*, pp. 153-167, World Scientific, 2008.
5. Vladimir Boginski and Clayton W. Commander. Recent Advances in Network Flow Problems Under Uncertainty. To appear in C.W. Commander, M.J. Hirsch, R.A. Murphey, and P.M. Pardalos (editors), *Optimization and Cooperative Control Strategies*, Lecture Notes in Control and Information Sciences, Springer 2009.
6. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Sergey Sarykalin, Timofey Turko, and Stan Uryasev. Robust Wireless Network Jamming Problems. To appear in C.W. Commander, M.J. Hirsch, R.A. Murphey, and P.M. Pardalos (editors), *Optimization and Cooperative Control Strategies*, Lecture Notes in Control and Information Sciences, Springer 2009.
7. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Oleg Shylo, Stan Uryasev, and Grigoriy Zrazhevsky. Jamming Communication Networks Under Complete Uncertainty. *Optimization Letters*, 2:1, pp. 53-70, 2008. (DOI:10.1007/s11590-006-0043-0)
8. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Stan Uryasev, and Grigoriy Zrazhevsky. The Wireless Network Jamming Problem. *Journal of Combinatorial Optimization*, 14:4, pp. 481-498, 2007. (DOI: 10.1007/s10878-007-9071-7)
9. Ashwin Arulselvan, Clayton W. Commander and Panos M. Pardalos. A Hybrid Genetic Algorithm for the Target Visitation Problem. *Naval Research Logistics*, revision submitted, February 2008.

10. Ashwin Arulsevan, Clayton W. Commander, Michael J. Hirsch, and Panos M. Pardalos. Communication Models for a Cooperative Network of Autonomous Agents. To appear in W.A. Chaovalitwongse, K.C. Furman, and F. Roberts (editors), *Computational Optimization and Logistics Challenges in the Enterprise*, Springer, 2008.
  11. Ashwin Arulsevan, Clayton W. Commander, Panos M. Pardalos, and Oleg Shylo. Managing network risk via critical node identification. Submitted to N. Gulpinar and B. Rustem (editors), *Risk Management in Telecommunication Networks*, Springer, 2007.
  12. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. A Random Keys Based Genetic Algorithm for the Target Visitation Problem. M.J. Hirsch, P.M. Pardalos, R.A. Murphey, and D.A. Grundel (editors), *Advances in Cooperative Control and Optimization*, Lecture Notes in Control and Information Sciences 369, pp. 389-397, Springer, 2007.
  13. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Oleg Shylo, and Stan Uryasev. Eavesdropping and Jamming Communications Networks. In D.A. Grundel, R.A. Murphey, P.M. Pardalos, and O.A. Prokopyev (editors), *Cooperative Networks: Control and Optimization*, pp. 101-112, Edward Elgar, 2008.
  14. Clayton W. Commander, Paola Festa, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. Cooperative Communication Problems in Ad-hoc Networks. In D.A. Grundel, R.A. Murphey, P.M. Pardalos, and O.A. Prokopyev (editors), *Cooperative Networks: Control and Optimization*, Edward Elgar, pp. 187-208, 2008.
  15. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. A One-Pass Heuristic for Cooperative Communication in Mobile Ad Hoc Networks. D.A. Grundel, R.A. Murphey, P.M. Pardalos, and O.A. Prokopyev (editors), *Cooperative Systems: Control and Optimization*, pp. 285-296, Springer, 2007.
  16. Clayton W. Commander, Michelle A. Ragle, and Yinyu Ye. Semidefinite Programming and the Sensor Network Localization Problem, SNLP. To appear in C.A. Floudas and P.M. Pardalos (editors), *Encyclopedia of Optimization*, second edition, Kluwer Academic Publishers, 2007.
  17. Clayton W. Commander, Paola Festa, and Mauricio G.C. Resende. Maximum Cut Problem, MAX-CUT. To appear in C.A. Floudas and P.M. Pardalos (editors), *Encyclopedia of Optimization*, second edition, Kluwer Academic Publishers, 2007.
  18. Clayton W. Commander. Broadcast Scheduling Problem, BSP. To appear in C.A. Floudas and P.M. Pardalos (editors), *Encyclopedia of Optimization*, second edition, Kluwer Academic Publishers, 2007.
  19. Clayton W. Commander and Panos M. Pardalos. A Survey of the Quadratic Assignment Problem, with Applications. *The Morehead Electronic Journal of Applicable Mathematics*, 4:1-15, 2005.
  20. Clayton W. Commander, Sergiy I. Butenko, and Panos M. Pardalos. On the Performance of Heuristics for Broadcast Scheduling. In D. Grundel, R. Murphey, and P. Pardalos (editors), *Theory and Algorithms for Cooperative Systems*, pp. 63-80, World Scientific, 2004.
- ◇ **Papers in Refereed Proceedings**
21. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. Detecting Critical Nodes in Sparse Graphs. On *9th INFORMS Telecommunications Conference* proceedings disk, 2008.
  22. Ashwin Arulsevan, Clayton W. Commander, Michael J. Hirsch, Panos M. Pardalos, and Mauricio G.C. Resende. Cooperative Communication in Ad-Hoc Networks. On *2007 National Fire Control Symposium* proceedings disk, 2007.

23. Clayton W. Commander, Paola Festa, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende, and Marco Tsitselis. A Greedy Randomized Algorithm for the Cooperative Communication Problem on Ad Hoc Networks, On *8th INFORMS Telecommunications Conference* proceedings disk, 2006.
  24. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. A GRASP Heuristic for the Cooperative Communication Problem in Ad Hoc Networks. *Proceedings of VI Metaheuristics International Conference*, pp. 225–230, 2005.
  25. Clayton W. Commander, Sergiy I. Butenko, Panos M. Pardalos, and Carlos A.S. Oliveira. Reactive GRASP with Path Relinking for Broadcast Scheduling. *Proceedings of the 40th Annual International Telemetry Conference*, pp. 792-800, 2004.
  26. Clayton W. Commander, Sergiy I. Butenko, and Panos M. Pardalos. A GRASP for Broadcast Scheduling in Ad-Hoc TDMA Networks. *International Conference on Computing, Communications, and Control Technologies*, 5:323-327, 2004.
- ◇ **Educational Articles**
27. Clayton W. Commander. Applications of Operations Research in the United States Air Force. *OR/MS Tomorrow*, Vol. 8, 2004.
- ◇ **Unpublished Papers**
28. Clayton W. Commander and Panos M. Pardalos. Eavesdropping and Jamming Communication Networks. Technical Report, Department of Industrial and Systems Engineering, University of Florida, 2006.
  29. Sergiy I. Butenko, Clayton W. Commander, and Panos M. Pardalos. On the Complexity of the Broadcast Scheduling Problem. Technical Report, 2004.
- ◇ **Working Papers**
30. Avni M. Shah, Clayton W. Commander, Vladimir L. Boginski, and Daniel A. Albert. Diagnosis of Wegener’s Granulomatosis via Predictive Modeling Data Mining Techniques. To be submitted to *Medical Decision Making*, 2008.
  31. Clayton W. Commander, Konstantin Kalinchenko, Stan Uryasev, and Thomas Young. Predicting Cesarean Delivery using Optimization Based Techniques. Working paper, 2008.
  32. Marc Banghart, Vladimir Boginski, Clayton W. Commander, and Eduardo L. Pasilliao. Predictive Modeling Techniques for LADAR Image Data. To be submitted to V. Boginski, C.W. Commander, P.M. Pardalos, and Y. Ye (editors), *Sensors: Theory, Algorithms, and Applications*, Springer, 2009.
  33. Vladimir Boginski and Clayton W. Commander. On the Growth Rate of  $\chi^2$ -Percentage Points. To be submitted to *Statistics and Probability Letters*, 2009.
  34. Ashwin Arulsevan, Clayton W. Commander, Michael J. Hirsch, and Panos M. Pardalos. Communication in a Network of Cooperative Autonomous Agents. To be submitted to *Naval Research Logistics*, 2009.
  35. Vladimir Boginski and Clayton W. Commander. Identification of Critical Nodes in Networks Under Uncertainty. Working paper, 2008.
  36. Sergiy Butenko, Clayton W. Commander, and Syataslav Trukhanov. Powered Iterative Methods for Linear Systems. Working paper, 2008.
- ◇ **Abstracts in Conferences**
37. Vladimir L. Boginski and Clayton W. Commander. Identifying Critical Nodes in Protein-Protein Interaction Networks, *INFORMS 2008 Annual Meeting*, Washington D.C., October 12-15, 2008.

38. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. Detecting Critical Nodes in Supply Chain Networks, *Humanitarian Logistics: Networks for Africa*, Lake Como, Italy, May 5-9, 2008.
39. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. Detecting Critical Nodes in Sensor Networks, *Sensors 2008: Theory, Algorithms, and Applications*, Shalimar, FL, April 24-26, 2008.
40. Vladimir L. Boginski and Clayton W. Commander. Solving Network Flow Problems Under Uncertainty, *Sensors 2008: Theory, Algorithms, and Applications*, Shalimar, FL, April 24-26, 2008.
41. Clayton W. Commander, Panos M. Pardalos, and Stan Uryasev. Eavesdropping (or Jamming) of Communication Networks, *AFOSR Optimization and Discrete Mathematics Meeting*, Arlington, VA, April 21-23, 2008.
42. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. Detecting Critical Nodes in Sparse Graphs, *9th INFORMS Telecommunications Conference*, College Park, MD, March 27-29, 2008.
43. Vladimir L. Boginski and Clayton W. Commander. Formulations of Network Flow Problems Under Uncertainty, *8th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 30 - February 1, 2008.
44. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Sergey Sarykalin, and Stan Uryasev. Stochastic Wireless Network Jamming Problems, *8th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 30 - February 1, 2008.
45. Ashwin Arulsevan, Clayton W. Commander, Michael J. Hirsch, and Panos M. Pardalos. Cooperative Communication of Ad-Hoc Networks, *8th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 30 - February 1, 2008.
46. Clayton W. Commander, Michael J. Hirsch, Panos M. Pardalos, and Mauricio G.C. Resende. Cooperative Communication in Ad-Hoc Networks, *2007 INFORMS National Meeting*, Seattle, WA, November 4-7, 2007.
47. Ashwin Arulsevan, Clayton W. Commander, and Panos M. Pardalos. Critical Node Detection in Sparse Graphs, *2007 INFORMS National Meeting*, Seattle, WA, November 4-7, 2007.
48. Clayton W. Commander, Michael J. Hirsch, Panos M. Pardalos, and Mauricio G.C. Resende. Cooperative Communication in Ad-Hoc Networks, *2007 National Fire Control Symposium*, San Diego, CA, July 30 - August 2, 2007.
49. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Sergey Sarykalin, Oleg Shylo, and Stan Uryasev. Eavesdropping (or Jamming) Communication Networks, *AFOSR Optimization and Discrete Mathematics Meeting*, Arlington, VA, May 7-9, 2007.
50. Clayton W. Commander, Panos M. Pardalos, Valeriy Ryabchenko, Stan Uryasev. Recent Advances in Eavesdropping and Jamming Communication Networks, *7th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 31 - February 2, 2007.
51. Clayton W. Commander, Paola Festa, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende, and Marco Tsitselis. A Greedy Randomized Algorithm for the Cooperative Communication Problem on Ad Hoc Networks, *8th INFORMS Telecommunications Conference*, Dallas, TX, March 30 - April 2, 2006.
52. Clayton W. Commander, Paola Festa, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende, and Marco Tsitselis. Improved GRASP for the Cooperative Communication Problem in Ad Hoc Networks, *6th International Conference on Cooperative Control and Optimization*, Gainesville, FL, February 1-3, 2006.

53. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. On the Cooperative Communication Problem in Mobile Ad Hoc Networks, *INFORMS Annual Meeting 2005*, San Francisco, CA, November 13-16, 2005.
54. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. A GRASP heuristic for the Cooperative Communication Problem in Ad Hoc Networks, *MIC2005: The Sixth Metaheuristics International Conference*, Vienna, Austria, August 22-26, 2005.
55. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. Finding Approximate Solutions for the Cooperative Communication Problem in Ad Hoc Networks, *International Conference on Computational Management Science*, Gainesville, FL, March 30 - April 3, 2005.
56. Clayton W. Commander, Carlos A.S. Oliveira, Panos M. Pardalos, and Mauricio G.C. Resende. A Greedy Randomized Algorithm for Cooperative Communication in Ad Hoc Networks, *5th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 20-22, 2005.
57. Clayton W. Commander, Sergiy I. Butenko, Panos M. Pardalos, and Carlos A.S. Oliveira. Reactive GRASP with Path Relinking for Broadcast Scheduling, *39th Annual International Telemetry Conference*, San Diego, CA, October 18-21, 2004.
58. Clayton W. Commander, Sergiy I. Butenko, and Panos M. Pardalos. A GRASP for Broadcast Scheduling in Ad-Hoc TDMA Networks, *International Conference on Computing, Communications, and Control Technologies (CCCT'04)*, Austin, TX, August 14-17, 2004.
59. Clayton W. Commander, Sergiy I. Butenko, and Panos M. Pardalos. On the Performance of Heuristics for Broadcast Scheduling in Ad-Hoc TDMA Networks, *Invitational Conference on Robust Optimization-Directed Design*, University of Florida (GERC), Shalimar, FL, April 19-21, 2004.
60. Clayton W. Commander, Sergiy I. Butenko, and Panos M. Pardalos. A Greedy Randomized Adaptive Search Procedure for the Broadcast Scheduling Problem, *4th International Conference on Cooperative Control and Optimization*, Destin, FL, November 19-21, 2003.

## Conference Presentations

1. "Detecting Critical Nodes in Sensor Networks", *Sensors 2008: Theory, Algorithms, and Applications*, Shalimar FL, April 24-26, 2008.
2. "Detecting Critical Nodes in Sparse Graphs", *9th INFORMS Telecommunications Conference*, College Park, MD, March 27-29, 2008.
3. "Stochastic Wireless Network Jamming Problems", *8th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 30 - February 1, 2008.
4. "Cooperative Communication in Ad-Hoc Networks", *2007 INFORMS National Meeting*, Seattle, WA, November 4-7, 2007.
5. "Recent Advances in Eavesdropping and Jamming Communication Networks", *7th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 31 - February 2, 2007.
6. "Eavesdropping/Jamming of Communication Networks", *AFOSS Optimization and Discrete Mathematics Meeting*, Ft. Walton Beach, FL, May 22-24, 2006.
7. "Improved GRASP for Cooperative Communication in Mobile Ad Hoc Networks", *6th International Conference on Cooperative Control and Optimization*, Gainesville, FL, February 1-3, 2006.
8. "Finding Approximate Solutions for the Cooperative Communication Problem in Ad Hoc Networks", *International Conference on Computational Management Science*, Gainesville, FL, March 30 - April 3, 2005.

9. "A Greedy Randomized Algorithm for Cooperative Communication in Ad Hoc Networks", *5th International Conference on Cooperative Control and Optimization*, Gainesville, FL, January 20-22, 2005.
10. "Heuristic Techniques for Broadcast Scheduling using GRASP", (On behalf of P.M. Pardalos) *INFORMS Annual Meeting 2004*, Denver, CO, October 24-27, 2004.
11. "Reactive GRASP with Path Relinking for Broadcast Scheduling", *39th Annual International Telemetry Conference*, San Diego, CA, October 18-21, 2004.
12. "A GRASP with Path Relinking for Broadcast Scheduling", *International Conference on Computing, Communications, and Control Technologies (CCCT'04)*, Austin, TX, August 14-17, 2004.
13. "On the Performance of Heuristics for Broadcast Scheduling in Ad-Hoc TDMA Networks", *Invitational Conference on Robust Optimization-Directed Design*, University of Florida (GERC), Shalimar, FL, April 19-21, 2004.
14. "A Greedy Randomized Adaptive Search Procedure for the Broadcast Scheduling Problem", *4th International Conference on Cooperative Control and Optimization*, Destin, FL, November 19-21, 2003.

## Other Talks

1. "Introduction to Optimization, with Military Applications", Air Force Research Laboratory, Eglin Air Force Base, FL, May 14, 2008.
2. "Optimization Problems in Telecommunications with Military Applications", Doctoral Defense, Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL, May 22, 2007.
3. "Eavesdropping and Jamming Communication Networks", Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL, August 17, 2006.
4. "A GRASP for Cooperative Communication in Mobile Ad Hoc Networks", Department of Industrial and Systems Engineering, University of Florida, Gainesville, FL, February 2, 2006.
5. "A Greedy Randomized Adaptive Search Procedure for the Broadcast Scheduling Problem", Freeman Computer Science Center, Eglin AFB, FL, November 5, 2003.

## Funded Research

- ◇ "Robust Optimization for Connectivity and Flow Patterns in Complex Dynamic Networks" \$589,000, (Co-PI with B. Balasundaram, V. Boginski, S. Butenko, and S. Uryasev). Sponsor: U.S. Department of Energy. (submitted)
- ◇ "Novel Reliability Characteristics and Related Phase Transition Problems in Complex Networks Under Uncertainty" \$387,000, 2008-2011, (PI with D. Jeffcoat). Sponsor: Air Force Office of Scientific Research.
- ◇ "Sensors 2008: Theory, Algorithms, and Applications", \$15,000. Sponsor: Air Force Office of Scientific Research.
- ◇ "Detecting and Jamming Dynamic Communication Networks in Anti-Access Environments", \$432,672, 2007-2010, (Co-PI with S. Uryasev and P.M. Pardalos). Sponsor: Air Force Office of Scientific Research.

## Professional Activities

- ◇ Referee for the following journals (number of reviews):
  - *Computers and Operations Research* (1)

- *Journal of Combinatorial Optimization* (5)
  - *Optimization* (1)
  - *Optimization Letters* (8)
- ◇ Reviewer for the following books:
    - *Optimization and Cooperative Control Strategies*, C.W. Commander, M.J. Hirsch, P.M. Pardalos, and R.A. Murphey (eds.), Lecture Notes in Control and Information Science, Springer, 2008.
    - *Pareto Optimality, Game Theory and Equilibria*, A. Migdalas, P.M. Pardalos, and L. Pit-soulis (eds.), Springer, 2006.
    - *Data Mining in Biomedicine*, P.M. Pardalos, V. Boginski and A. Vazacopulos (eds.), Springer, 2005.
  - ◇ Co-organizer of the following conferences:
    - Sensors 2008: Theory, Algorithms, and Applications, University of Florida REEF, Shalimar, FL, April 26-28, 2008.
    - 8th International Conference on Cooperative Control and Optimization, University of Florida, Gainesville, FL, January 30 - February 1, 2008.
    - 7th International Conference on Cooperative Control and Optimization, University of Florida, Gainesville, FL, January 31 - February 2, 2007.
  - ◇ Session chair for the following conferences:
    - 8th INFORMS Telecommunications Conference, Dallas, TX, March 30 - April 1, 2006.
    - 6th International Conference on Cooperative Control and Optimization, University of Florida, Gainesville, FL, February 1-3, 2006.
    - International Conference on Computational Management Science, University of Florida, Gainesville, FL, March 30 - April 3, 2005.
    - 5th International Conference on Cooperative Control and Optimization, University of Florida, Gainesville, FL, January 20-22, 2005.
  - ◇ Co-organizer of an Invited Session on Combinatorial Optimization in Wireless Networks, International Conference on Computing, Communications, and Control Technologies (CCCT'04), Austin, TX, August 14-17, 2004.
  - ◇ Co-editor (in-chief) of *OR/MS Tomorrow*. (August 2004 - August 2006)

## Medically Related Activities

- ◇ **April 2007 – May 2008, Sacred Heart Hospital, Destin, FL**  
**Emergency Department Volunteer (> 150 hours)** Duties consisted of helping register patients, transporting patients, and assisting nursing staff.
- ◇ **July 2007 – May 2008, Pat T. Tidwell, M.D., P.A., Niceville, FL**  
**Shadowing Student (> 60 hours)** Shadowed family medicine specialist in a busy private practice.

## Awards and Distinctions

- ◇ Paper: "C.W. Commander, S.I. Butenko, P.M. Pardalos, C.A.S. Oliveira. Reactive GRASP with Path Relinking for Broadcast Scheduling" received 2<sup>nd</sup> prize in graduate student paper competition at 40<sup>th</sup> Intl. Telemetry Conference.

- ◇ 96 Air Base Wing Civilian of the Quarter (Jan-Mar 2004)
- ◇ 96 Communications Group Civilian of the Quarter (Jan-Mar 2004)
- ◇ 96 Communications Group Special Act or Service Award - For participating in efforts resulting in CMM Level 5 certification

### **Professional Memberships**

- ◇ Institute for Operations Research and Management Sciences (INFORMS)
- ◇ Phi Beta Kappa
- ◇ Golden Key International Honor Society
- ◇ Phi Kappa Phi Honor Society
- ◇ Tau Beta Pi Honor Society
- ◇ The University Of Florida Alumni Association

### **Salient Computer Skills**

- ◇ **Operating Systems:** MS Windows (all flavors), Apple OS 9.1, Linux
- ◇ **Programming:** FORTRAN 77/90, C, C++, Visual Basic, Java, HTML
- ◇ **Applications:** MATLAB, Mathcad 2001
- ◇ **General:** L<sup>A</sup>T<sub>E</sub>X, Microsoft Office, FTP, Telnet

### **Languages**

- ◇ English – speak, understand, read, write (Native)
- ◇ Spanish – speak, understand, read, write (Intermediate)
- ◇ Hebrew – read

## References

Distinguished Professor Panos M. Pardalos  
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