

HAO WANG

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CAREER OBJECTIVE

Seeking a tenure track faculty position in academia at the level of assistant professor

RESEARCH INTEREST

- Statistical signal processing
- Multicarrier (OFDM/OFDMA) communications
- Statistical study on Fourier transform, Cramer-Rao bound

EDUCATION

Ph.D. Jan. 2001 – August 2004 Electrical Engineering, Syracuse University, Syracuse, NY.
(expected) Advisor: Dr. Biao Chen
M.S. Sep. 1996 – July 1998 Electrical Engineering, University of Connecticut, Storrs, CT.
Advisor: Dr. Yaakov Bar-Shalom
B.S. Sep. 1991 – July 1996 Electrical Engineering, Tsinghua University, Beijing, China.

RESEARCH EXPERIENCE

Research Assistant Syracuse University, Syracuse, NY, Jan. 2001 – May. 2004.
Research Assistant University of Connecticut, Storrs, CT, Sep. 1996 – July 1998.

WORKING EXPERIENCE

Software Engineer Schlumberger Technologies, Asian Ltd., Beijing, China, May. 1999 – Sep. 2000.

HONORS

- Wilbur Le-Page Scholarship, May, 2004, Syracuse University, Syracuse, NY
- University Fellowship, Sep. 2003-May 2004, Syracuse University, Syracuse, NY.
- Research Assistantship, Jan. 2001- Sep. 2003, Syracuse University, Syracuse, NY.
- Research Assistantship, Sep. 1996-June 1998, University of Connecticut, Storrs, CT.

PUBLICATIONS

Journal

1. H. Wang and B. Chen, "On the distribution of the maximum power of DFT coefficients with random input", *to be submitted to IEEE Trans. Signal Processing*, 2004.
2. H. Wang and B. Chen, "Asymptotic distributions and peak-to-average power ratio analysis for uplink OFDMA signals", *submitted to IEEE Trans. Communications*, March 2004.

3. H. Wang, Y. Lin, and B. Chen, "Data efficient blind OFDM channel estimation using receiver diversity", *IEEE Trans. Signal Processing*, vol. 51, pp. 2613-2624, Oct. 2003.
4. B. Chen and H. Wang, "Blind OFDM carrier frequency offset estimation via oversampling", *IEEE Trans. Signal Processing*, vol. 52, pp. 2047-2057, July 2004.
5. T. Kirubarajan, H. Wang and Y. Bar-Shalom, "Efficient multisensor fusion using multidimensional data association", *IEEE Trans. Aerospace and Electronic Systems*, AES-37(2), pp. 386-400, April 2001.
6. H. Wang, T. Kirubarajan, and Y. Bar-Shalom, "Precision large scale air traffic surveillance using an IMM estimator with assignment", *IEEE Trans. Aerospace and Electronic Systems*, AES-35(1), pp.255-266, January 1999.

Conference Proceedings

1. H. Wang and B. Chen, "Asymptotic distributions and peak power analysis for uplink OFDMA signals", *ICASSP'2004*, Montreal, Canada, May 2004.
2. H. Wang and B. Chen, "A comparison of the subcarrier allocation schemes for multiuser multicarrier communication systems", *CISS'2004*, Princeton, NJ, March 2004.
3. H. Wang and B. Chen, "On the distribution of peak-to-average power ratio for non-circularly modulated OFDM signals", *IEEE Globecom'2003*, San Francisco, CA, Dec. 2003.
4. H. Wang and B. Chen, "On the power correlation of OFDM symbols: Some observations, derivations, and applications", *CISS'2003*, Baltimore, MD, March, 2003.
5. Q. Cheng, H. Wang, and B. Chen, "Joint timing synchronization and channel estimation using receiver diversity", *the 36th Annual Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, Nov. 2002.
6. Y. Lin, H. Wang, and B. Chen, "Blind identification of the wireless OFDM channel using receiver diversity", *Proceedings of the 6th International Conference on Signal Processing (ICSP'2002)*, Beijing, China, August, 2002.
7. B. Chen and H. Wang, "Maximum likelihood estimation of OFDM carrier frequency offset", *Proc. ICC2002*, vol. 1, pp. 49-53, New York, April 2002.
8. H. Wang, Y. Lin, and B. Chen, "Blind OFDM channel estimation using receiver diversity", *CISS'2002*, Princeton, NJ, March 2002.
9. B. Chen and H. Wang, "Blind OFDM frequency offset estimation via oversampling", *35th Asilomar Conference on Signals, Systems, and Computers*, Pacific Grove, CA, November, 2001
10. T. Kirubarajan, H. Wang and Y. Bar-Shalom, "Multisensor Fusion Using Multidimensional Data Association", *Proc. SPIE Conf. Signal Processing, Sensor Fusion and Target Recognition (#3374)*, Orlando, FL, April 1998.
11. H. Wang, T. Kirubarajan, Y. Li and Y. Bar-Shalom, "Large Scale Air Traffic Surveillance Using an IMM Estimator with Assignment", *Proc. SPIE Conf. Signal and Data Processing of Small Targets (#3163)*, San Diego, CA, July 1997.

Book Chapter

1. H. Wang, T. Kirubarajan and Y. Bar-Shalom, "Advanced Estimation and Optimization for Air Traffic Surveillance", *Perspectives in Control: Theory and Applications*, (D. Normand-Cyrot, ed.) Springer, 1998

TEACHING INTEREST

- Analog Communications, Digital Communications, Wireless Communications, Information Theory
- Signals and Systems, Digital Signal Processing, Adaptive Signal Processing, Statistical Signal Processing, Estimation, Signal Detection
- Probability and Stochastic Process, Linear Control Systems, Electronic Circuits, Analog/Digital Electronics

VISA STATUS

- F-1 student Visa holder.

PROFESSIONAL AFFILIATION

- Student member, IEEE and IEEE Communications Society.

REFERENCES

- Professor Biao Chen
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