|  |  |  |
| --- | --- | --- |
|  | Hong Zhou Assistant professor, Department of Mathematics and Statistics  (870) 680-8120  hzhou@astate.edu |  |

### Current Position

Position Title: Assistant Professor, Department of Mathematics and Statistics

Current Academic Rank: Assistant Professor

Rank Since: Fall 2006

**Degrees**

|  |  |
| --- | --- |
| Ph D | Statistics, University of Memphis, Memphis, TN, 2006 |
| MS  MS | Statistics, University of Memphis, Memphis, TN, 2005  Electric & Electronic Engineering, Hau Zhong University of Science & Technology, China, 1988 |
| BS | Electric & Electronic Engineering, Hau Zhong University of Science & Technology, China, 1985 |

### Scholarly Contributions and Creative Productions

Grants ADHE = Arkansas Department of Higher Education

SURF = Student Undergraduate Research Fellowship Program

ADHE-SURF: “Analysis of Generalized Minimum Aberration Designs Using R Programming Language”, January 2013-May 2013, $2,750

ADHE-SURF: “Constructions of Generalized Minimum Aberration Designs of 32 and 36 Runs”, January 2012—December 2012 $4,000

ASU Faculty Research Fund. Arkansas State University – July 2010—June 2011, $3,680

NSF EPSCoR Fellowship. Arkansas Science & Technology Authority: “Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients for Three-way Mixed Models”, January 2009—December 2009, $3,900

Journal Publications

W.Y. Tan, & H. Zhou (2013). “New Cancer Stochastic Models Involving both Hereditary and Non-Hereditary Cancer: A New Approach”. ISRN *Biomathematics,* Vol. 2013, Article954912, 19pages. DOI: 10.1155/2013/954912.

Tan, W.Y., & Zhou, H. (2011). A New Stochastic Model of Retinoblastoma Involving both Hereditary and Non-Hereditary Cancer Cases. Journal of Carcinogenesis and Mutagenesis, 2(117), Doi:10.4172/2157-2158.1000117.

Zhou, H., Muellerleile, P., Ingram, D.K., & Wong, S.P. (2011). Confidence intervals and f tests for intraclass correlation coefficients based on three-way mixed models. Journal of Educational and Behavioral Statistics, 36(5), 638-671.

Proceedings Publications

Calhoun, J., Graham, J., Zhou, H., & Jiang, H. (2012). “Acceleration of Generalized Minimum Aberration Designs of Hadamard Matrices on Graphics Processing Units”. *Proceedings of the 2012 IEEE 14ht International Conference on High Performance Computing and Communications*, DOI 10.1109/HPCC.2012.191, 1294-1300.

Zhou, H., Leonard, S., & Ingram, D.K. (2011). “Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients”. *Proceedings of 2011 Hawaii University International Conferences on Mathematics and Engineering*, ISBN# 2160-2573,

Mei, C., Li, R., Zhou, H., & Jiang, H. (2010). “Exploiting Bit and GPU-Thread Level Parallelism in Construction of Generalized Minimum Aberration Designs”. *Proceedings of the 2010 International Conference on Parallel and Distributed Processing Techniques and Applications*, 235-240.

Presentations

W.Y. Tan and H. Zhou (2013). “New Stochastic Models of Carcinogenesis for Human Cancer Involving Multiple Pathways”, BIT 6th World Cancer Congress, May 23-25, 2013, Xian, China.

L. White, D. Ingram and H. Zhou (2013). “Constructions of Generalized Minimum Aberration Designs of 32 and 36 Runs”, Create@ ASTATE, April 11, 2013.

L. White, D. Ingram and H. Zhou (2013). “Projection Properties of Generalized Minimum Aberration Designs of 32 Runs”, OK-AR MAA, Oklahoma State University, Stillwater, OK, April 5-6, 2013.

L. White, D. Ingram and H. Zhou (2013). “Projection Properties of Generalized Minimum Aberration Designs of 32 Runs”, Nebraska Conference for Undergraduate Women in Mathematics, Lincoln, NE, Jan. 25-27, 2013.

W. Y. Tan and H. Zhou (2013). “New Biologically Supported Models of Carcinogenesis Involving Hereditary and Non-Hereditary Cancer Cases”, Target Meeting 2nd World Cancer Online Conference, January 12, 2013.

White, L., Ingram, D.K., & Zhou, H. (2012). “Constructions of Generalized Minimum Aberration Designs of 32 and 36 Runs”. 18th annual SAEOPP McNair/SSS Research Conference of the Southeastern Association of Educational Opportunity Program (SAEOPP).

White, L., Ingram, D., & Zhou, H. (2012). “Constructions of Generalized Minimum Aberration Designs of 40 and 44 Runs”. Mathematical Association of America, MathFest.

Tan, W.Y., & Zhou, H. (2012). “New Stochastic Models of Human Eye Cancer Involving Both Hereditary and Non-hereditary Cancers”. Joint Statistical Meetings.

Zhou, H., Leonard, S., & Ingram, D.K. (2011). “Confidence Intervals on Generalizability Coefficients for Three-Way Mixed Models and Simulation Study”. Hawaii University International Conferences on Mathematics and Engineering.

Zhou, H., & Leonard, S. (2010).”Algorithm to Generate Combinations under Constraints”. Undergraduate Scholars Day (USD).

Zhou, H., & Tan, W. (2010). “Characterization of Human Eye Cancer Incidence by New Stochastic Models of Carcinogenesis”. Western North American Regions (WNAR) conference.

Zhou, H., & Leonard, S. (2010). “Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients for Three-way Random Effect Models”. Nebraska Conference for Undergraduate Women in Mathematics.

Zhou, H., & Ingram, D. (2010). “Optimal Non-regular Designs of 32 Runs and Their Properties”. 2010 Research Conference on Statistics in Quality, Industry, and Technology.

Zhou, H., & Tan, W. (2009). “A Stochastic and State Space Model for Human Eye Cancer Involving Both Hereditary and Non-hereditary Cancer Genes”. 2009 Joint Statistical Meetings (JSM).

Zhou, H., & Leonard, S. (2009). “Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients for Two-way Mixed Models”. The 16th Annual Arkansas Undergraduate Research Conference (AURC).

Zhou, H., & Leonard, S. (2009). “Computer Simulation Study of Confidence Intervals for Intraclass Correlation Coefficients for Two-way Models”. Undergraduate Scholars Day (USD).

Zhou, H., & Tan, W. (2008). “Stochastic and State Space Models of Human Eye Cancer: Some New Insights”. Eastern North American Regions (ENAR) conference.

### Institutional Committees

University

Undergraduate Admissions Appeal Committee (University)

College of Sciences and Mathematics representative, Fall 2010 - present

### Other Institutional Service

Honors Thesis Committee (University)

(Committee Chair) Fall 2009

Department Graduate Student Comprehensive Exam Committee

(Committee Member) Fall 2008 - Summer 2012

Department curriculum committee

(Committee Member) Fall 2008 - present

Department Scholarship and Awards Committee

(Committee Member) Fall 2008 – present

Department Graduate Assistantship Awards Committee

(Committee Member) Fall 2008 – present

Department MS Statistics Committee

(Committee Member) Fall 2008 – present

Statistics Faculty Search Committee

(Committee Member) Fall 2007 - Fall 2009

The Northeast Arkansas Regional Science Fair

Judge, 2008—present

Crowley's Ridge BEST Robotics

Judge for spirit & sportsmanship, 2008—present

### Teaching

Fall 2006 Courses:

|  |
| --- |
| STAT 3233 002 - Applied Statistics I |
| STAT 3233 003 - Applied Statistics I |
| STAT 4453 001 - Probability and Statistics I |

Spring 2007 Courses:

|  |
| --- |
| STAT 3233 001 - Applied Statistics I |
| STAT 3233 002 - Applied Statistics I |
| STAT 3233 003 - Applied Statistics I |
| STAT 5463 1 - PROBABILITY AND STATISTICS II |

Summer 2007 Courses:

|  |
| --- |
| STAT 3233 002 - Applied Statistics I |
| STAT 6723 1 - PROBABILITY |

Fall 2007 Courses:

|  |
| --- |
| MATH 2143 004 - Business Calculus |
| STAT 3233 003 - Applied Statistics I |
| STAT 4453 001 - Probability and Statistics I |

Spring 2008 Courses:

|  |
| --- |
| MATH 2143 004 - Business Calculus |
| STAT 3233 003 - Applied Statistics I |
| STAT 3233 004 - Applied Statistics I |
| STAT 4463 001 - Probability and Statistics II |
| STAT 5463 1 - PROBABILITY AND STATISTICS II |

Summer 2008 Courses:

|  |
| --- |
| STAT 6673 1 - DESIGN OF EXPERIMENTS |

Fall 2008 Courses:

|  |
| --- |
| MATH 2143 001 - Business Calculus |
| MATH 2183 001 - Discrete Structures |
| STAT 6703 1 - STATISTICAL ANALYSIS I |

Spring 2009 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| STAT 4463 001 - Probability and Statistics II |
| STAT 5463 1 - PROBABILITY AND STATISTICS II |
| STAT 6713 1 - STATISTICAL ANALYSIS II |

Summer 2009 Courses:

|  |
| --- |
| STAT 6723 1 - PROBABILITY |

Fall 2009 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| STAT 3233 003 - Applied Statistics I |
| STAT 4453 001 - Probability and Statistics I |
| STAT 4453 002 - Probability and Statistics I |

Spring 2010 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| STAT 3233 002 - Applied Statistics I |
| STAT 4463 001 - Probability and Statistics II |
| STAT 5463 1 - PROBABILITY AND STATISTICS II |

Summer 2010 Courses:

|  |
| --- |
| STAT 3233 002 - Applied Statistics I |

Fall 2010 Courses:

|  |
| --- |
| MATH 2143 004 - Business Calculus |
| MATH 2183 001 - Discrete Structures |
| STAT 6703 1 - STATISTICAL ANALYSIS I |

Spring 2011 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| STAT 6713 1 - STATISTICAL ANALYSIS II |

Summer 2011 Courses:

|  |
| --- |
| MATH 2214 001 - Calculus II |
| STAT 3233 002 - Applied Statistics I |

Fall 2011 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| STAT 3233 003 - Applied Statistics I |
| STAT 3233 004 - Applied Statistics I |

Spring 2012 Courses:

|  |
| --- |
| MATH 2183 001 - Discrete Structures |
| MATH 2214 001 - Calculus II |
| MATH 2214 H03 - HNRS CALCULUS II |
| MATH 459V 001 - Special Problems in Mathematics |

Summer 2012 Courses:

|  |
| --- |
| MATH 2214 001 - Calculus II |
| STAT 3233 002 - Applied Statistics I |

Fall 2012 Courses:

|  |
| --- |
| MATH 2183 001 - DISCRETE STRUCTURES |
| MATH 459V 002 - ANALYSIS OF NON REGULAR DESIGN |
| STAT 4453 001 - PROBABILITY AND STATISTICS 1 |
| STAT 4453 H01 - HNRS PROBABILITY STATISTICS 1 |
| STAT 6703 001 - STATISTICAL ANALYSIS I |