

Statistics and Probability Program at Clemson

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Statistics

What is Statistics?

Statistics is the science of learning from data, and of measuring, controlling, and communicating uncertainty; and it thereby provides the navigation essential for controlling the course of scientific and societal advances (Davidian, M. and Louis, T. A.)

What can Statisticians do?

Statisticians apply statistical thinking and methods to a wide variety of scientific, social, and business endeavors in such areas as astronomy, biology, education, economics, engineering, genetics, marketing, medicine, psychology, public health, sports, among many. The best thing about being a statistician is that you get to play in everyone else's backyard. (Tukey, J., Bell Labs, Princeton University)

Career in Statistics

- **Academy:** (Teaching or Research) University, Research Position in Pharmaceutical Company or National Institutes of Health, etc.
- **Health and Medicine:** Animal health, Biostatistics, Clinical Trails, Epidemiology, Genetics, Pharmacology, Public Health, etc.
- **Business and Industry:** Agriculture, Chemistry, Computer Science, Economics, Engineering, Finance, Insurance, Manufacturing, Marketing, Quality Improvement, Reliability, etc.
- **Government:** Bureau of Justice Statistics, U.S. Census Bureau, Ecology, Forestry, Government Regulation, Law, National Defense, Population Research, Risk Assessment, Surveys, etc.

Current Faculties

Statistics and Probability

- **A. Brown**
- **C. Gallagher**
- **Y. Li**
- **R. Lund**
- **C. McMahan**
- **C. Park**
- **X. Sun**
- **R. Taylor**
- **C. Williams**

Applied Statistics

- **W. Bridges**
- **P. Gerard**
- **H. Hill**
- **J. Luo**
- **J. Rieck**
- **J. Sharp**

Probability in OR

- **X. Liu**
- **B. Fralix**
- **P. Kiessler**

Tip: Try to set up a deadline for your research project.

Current Courses:

- MthSc: 800, 801, 802, 804, 805, 806, 807, 808, 809, 881, 884, 885, 901, 902, 981.
- EX ST: 801, 802, 803, 804, 805, 811, 812, 815, 816, 817, 819.
- Other related courses: 803, 817, 818, 821, 822, 831, 927, etc.

Tip: Pass your prelims ASAP.

Resources for graduate students: training

- Software(s): R Language (academy) and SAS (industry)
- Consulting (for professors in other departments; Statistics and Mathematical Consulting Center is coming.)
- Teaching 203, 301, 302, 309, etc, (teaching award).
- Journals:
 1. <http://admin.webofknowledge.com/SessionError.cgi?CSID=&DestApp=JCR&Error=SESSION+NOT+ACTIVE>
 2. <http://arxiv.org/list/stat/new>

Resources for graduate students: presentation

- Present in Seminars: GSS, statistics and probability research seminar , statistical student research meetings, etc.
- Conferences: student paper competitions, career placement, travel awards from the conferences, department, and PEGAS, etc. (PLAN AHEAD)
 - Joint Statistical Meetings
 - Eastern North American Region Annual Meetings (ENAR)
 - INFORMS
 - IMS annual meeting
 - Southern Regional Council on Statistics (SRCOS)
 - ASA South Carolina Chapter Annual Meeting (SC-ASA)
 - The Clemson/UGA Joint Seminar
 - Southeast Probability Conference
 - <http://www.amstat.org/dateline/index.cfm?fuseaction=upcoming&nl=0828>

Resources for graduate students: job hunting

- Internships: (PLAN AHEAD)
<http://www.amstat.org/education/internships.cfm>
- Job lists:
 - University of Florida Site:
<http://www.stat.ufl.edu/vlib/Index.html>
 - University of Washington Site:
<http://www.stat.washington.edu/www/jobs/>
 - Purdue University Site: <http://www.stat.purdue.edu/resources/jobs/listings/jobs/>
 - Amstat News Job Listing: <http://jobs.amstat.org/jobs>

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 - Purdue University Site: <http://www.stat.purdue.edu/resources/jobs/listings/jobs/>
 - Amstat News Job Listing: <http://jobs.amstat.org/jobs>
- Professional Societies: ASA, ENAR, IMS, SIAM.
- Others: help your advisor on grant application, reviewer experience, service (organizing a seminar), etc.
- References

Thank you!