

# Purdue Statistics IS Data Science

## STATISTICS MAJORS

Statistics is the mathematical and computational study of data and chance. It is a methodological discipline; statisticians often work closely with people in other fields to design production of data, analyze data, and draw conclusions from data. Much of these data are considered massive data.

### RESEARCH OPPORTUNITIES

- Applied Statistics
- Bayesian Statistics
  Theory & Application
- Big Data Applications
- Computational Statistics
  Machine Learning, Data Mining & Visualization
- Computational Finance
- Environmental and Spatial Statistics
- Statistical Bioinformatics Genetics, Genomics, Epigenomics, Proteomics
- Theoretical & Applied Statistics
- Theoretical & Applied Probability

#### **FUNDING OPPORTUNITIES**

- Undergrad Fellowships
- Living Community
- Graders

# FREQUENTLY ASKED QUESTIONS

www.stat.purdue.edu

#### **UNIDERGRAD COURSES:**

www.stat.purdue.edu/academic\_programs/undergraduate/index.php

#### **DOUBLE MAJORS:**

www.stat.purdue.edu/academic\_programs/undergraduate/double\_major\_statistics\_actuarial\_science.php

#### **STATISTICS MINOR:**

www.stat.purdue.edu/academic programs/undergraduate/minor.php

#### **CAREER DEVELOPMENT:**

www.stat.purdue.edu/ cademic programs/undergraduate/

# **STATCOM**

- Statistics in the Community (StatCom) is a volunteer community outreach organization started at Purdue University's Department of Statistics in 2001.
- Directed and staffed by graduate students, it provides professional statistical consulting services to governmental and nonprofit groups free of charge.
- http://www.stat.purdue.edu/external\_relations/statcom/

## **5TH YEAR MASTERS**

- Many positions for statisticians require the M.S. in Applied Statistics degree. This is a professional degree program (think of an MBA) that prepares for employment as a statistician, and is quite different from the research graduate program leading to the Doctorate.
- The Applied M.S. is normally a two-year degree program. However, an undergraduate student on the West Lafayette campus of Purdue who elects the Statistics Major with Mathematics emphasis can earn the M.S. in one additional year of study.
- This requires careful planning; students who are considering the Fifth-Year program should consult a faculty advisor about suitable electives in their undergraduate program. See the description and sample plan for <a href="Fifth Year Applied Statistics">Fifth Year Applied Statistics</a>. Undergraduates at Purdue contact: <a href="graduate@stat.purdue.edu">graduate@stat.purdue.edu</a> early.