



**Georgia
Tech**

CREATING THE NEXT

Undergraduate Research Information Session

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Assoc. Prof and Assoc. Chair

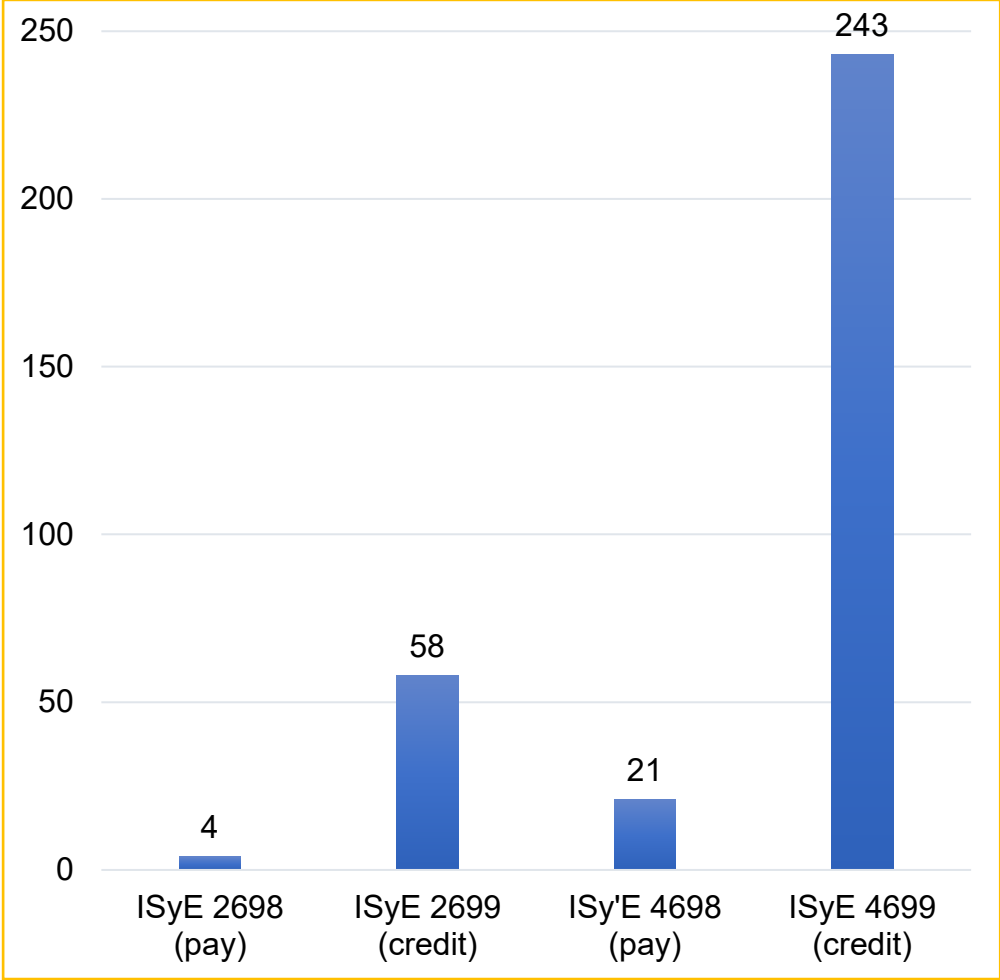
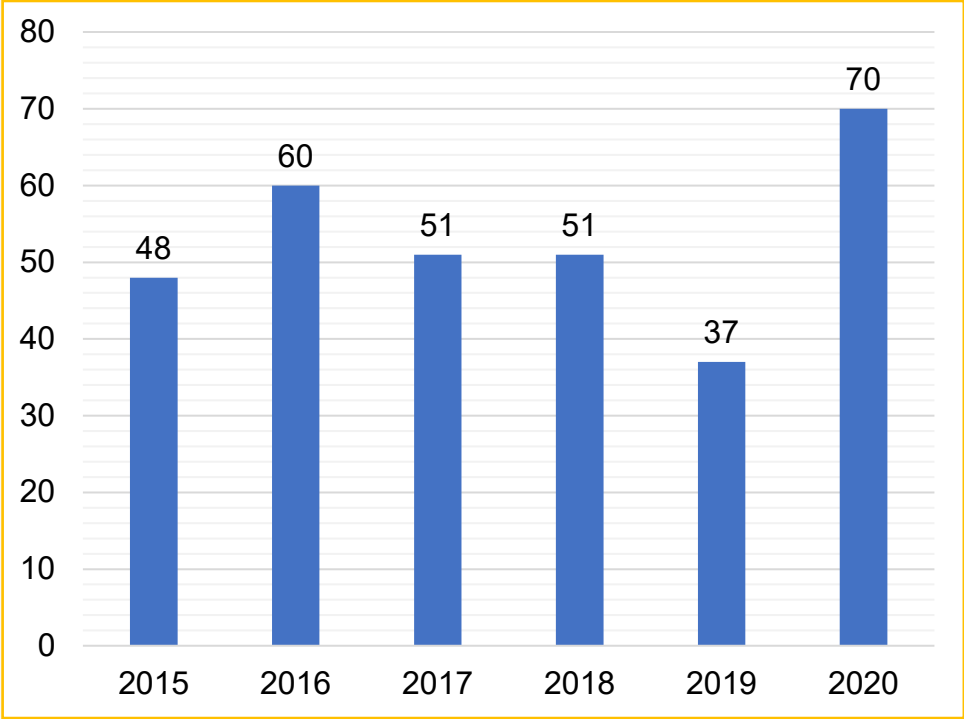
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Agenda

- **Overview**
- **Professors talk about what they are looking for and potential projects**
- **Students share experiences**
- **Q/A**

No of students found research opportunities



Undergraduate Research

- **Is**
 - **Learn research and do something you are interested in**
 - **Learn something**
 - **Free elective**
 - **1 – 3 credits or pay**
 - **Letter grade or P/F, depending faculty**
- **Is not**
 - **Best way to learn IE**
 - **GPA booster (faculty may not take low GPA student)**
- **President's Undergrad Research Award (PURA)**

What professors said

- **Try something you are passionate about**
- **Try something for fun**
- **Be independent learner and researcher**
- **Be willing to take a risk: not afraid of failure**
- **Work with world class faculty members**
- **Have background or be good at what you want to do**

- **Past students have won awards!**

How to find research opportunity

- **Do your homework**
 - **Faculty websites**
 - **Read this introduction**
- **Send good e-mail**
- **Show curiosity and aptitude in your classes**
- ...

Partial list of faculty supervisors

- **Alexopoulos: Simulation**
- **Ayer: health systems, fun things**
- **Boland, optimization apps**
- **Deng: financial systems**
- **Dey: optimization**
- **Foley: applied probability**
- **Gebraeel: Prognostics**
- **Goldsman: fun things**
- **Gupta: On-line learning**
- **Huo: machine learning**
- **Keskinocak, humanitarian**
- **Kim: simulation**
- **Lu: analytics**
- **Mei: statistics, data mining**
- **Maguluri: Resource in data ctrs**
- **Montreuil: Physical Internet**
- **Nazzal: Election system**
- **Paynabar: analytics**
- **Serban, health system analytics**
- **Sokol: sports analytics**
- **Sun: power system**
- **Thomas: energy, sustainability**
- Tovey: interesting things
- Van Hentenryck: Mobility
- Xie: analytics
- Yang: Health, data analysis
- Zhang (Chuck): 3-D printing
- Zhao: machine Learning
- Zhou (Chen): food desert, food supply chain and healthcare cost and service

Students participated research suggest

- **Engage with faculty early, build connection & interest**
- **Develop computing skills in classes/internships**
 - Python/R
 - SQL/Excel
 - Optimization, simulation, etc.
- **Get pre-exposure to research**
 - VIP, UROP, Summer REU, research fairs and presentations
 - Approach directions of focus with an open mind

Registration Procedure

1. Student
 - Find an advisor
2. Request for Undergraduate Research Approval
 - For Credit: ISYE 2699/4699, [on-line form](#)
 - For Pay: ISYE 2698/4698, [on-line form](#)
3. Advisor approval
 - Approval by Friday at 9 AM on last day of Phase II
4. Zhou approval
 - Approve or disapprove
5. Register if approved
 - make sure to select P/F or Letter grade, and number of credit.

Questions?

