# UNDERGRADUATE RESEARCH AND CAREER DEVELOPMENT UPDATES PURDUE COMPUTER SCIENCE

Ranjani Rao

**Undergraduate Research and Career Development Specialist** 



## My work with CS and Data Science Majors:

- Help students with questions on career development and undergraduate research.
- Resume Reviews.
- Linked In Reviews.
- Internship/Job Search Troubleshooting.
- Career Planning.
- Graduate School Planning.
- Undergraduate Research Exploration.
- Graduate School Applications.
- Exploration of training opportunities.
- Presentations in seminar classes on various topics.



# CS Undergraduate Research and Career Support Desk

Ranjani Rao, Undergraduate Research and Career Development Specialist, Purdue Computer Science.

When: Fall 2021 – Spring 2022- Mondays and Thursdays 1:30-3:00 p.m.\*

Where: LWSN Commons\*

Who: CS and CS-DS Majors.

Services offered:

Resume reviews, LinkedIn reviews, career planning, graduate school planning, undergraduate research search strategies, internship and job search strategies and troubleshooting.

Check-In process: Please sign in on paper, grab a seat and get comfortable in the Lawson Commons. Bring something to do while you wait. You will be invited to the support desk when it is your turn!



<sup>\*</sup>Time and location are subject to change in case of Company Days and Departmental Events in LWSN Commons, for schedule updates please check: <a href="https://www.cs.purdue.edu/calendar/index.html">https://www.cs.purdue.edu/calendar/index.html</a>

# *Undergraduate Research in Purdue Computer Science: Quick Facts 2017-2021*

Table 1: Independent Studies led by Purdue CS Faculty 2017-2021						
	2017	2018	2019	2020	2021	
CS 39000	25	20	18	13	16	
CS 49000	39	59	55	42	28	
TOTAL						
Independent Studies: 315	64	79	73	55	44	

Table 2: Papers co-authored by Purdue CS Faculty with undergraduates ( <u>LINK to</u> <u>view the complete list</u> )				
2021	12			
2020	14			
2019	11			
2018	3			
2017	4			
Total	44			

Table 3: Honors Research Project Enrollments 2017-2021						
	2017	2018	2019	2020	2021	
CS 49700	10	16	8	13	14	
<b>Total number of students enrolled between 2017-2021 = 61 students</b>						



# Undergraduate Research Updates: Avenues for publication.

#### Purdue Computer Science Undergraduates published in Journal of Purdue Undergraduate Research 2017-2020 <u>LINK to JPUR</u>

Eli Coltin	2021	Good Data for Good Decisions about Resident Retention Analysis on Resident Retention	Article
Eli Coltin	2021	Automated Data Processing: Making Community Indicators Possible for Lafayette, Indiana	Research Snapshot
Noah Alderton	2020	Hot and Cold: Quantifying the Variation of Sentiment in Supreme Court Confirmation Hearings	Article
Jesse Giampaolo	2020	Developing Unmanned Aerial Systems Skills Through a Creative Project	Research Snapshot
Haozhe Zhou	2020	Prerequisite Course Recommendation Based on Course Description and Students' Grades	Research Snapshot
Chufan Gao	2018	Out of the Box: Impact of Active Learning on Future Student Performance	Research Snapshot
Karan Samel	2017	Predicting Advertisement Clicks Using Deep Networks: Interpreting Deep Learning Models	Article

- CS majors have participated in the following Undergraduate Research Conferences
  - Fall Research Expo
  - Spring Research Conference
  - Summer Research Symposium

#### **Professional conferences and journals in various CS disciplines:**

LINK to papers CS Faculty have co-authored with undergraduates between 2017-2021.



# Observations from the Undergraduate and Career Support Desk

#### **Trends**

- Stronger student population raring to go right from their first year!
  - More early stage CS and Data Analytics coursework and certifications, through online learning.
  - More students with USA Computing Olympiad Experience (Silver and Gold ratings) and more interest in Competitive Programming.
  - More participants in the Hello World Freshman Hackathon and Boilermake Hackathons.
  - More early stage students participating in project based experiences across campus Engineering Projects in Community Service (EPICS), The Data Mine, Vertically Integrated Projects (VIP).
  - More first years and sophomores looking for early stage opportunities.



### Recruitment Trends Discussion Notes

Question: How have your recruitment practices changed in the last year to adapt to the varied pandemic related policy changes?

Here are the notes I took during the meeting. Thank you all for your inputs!

- More virtual recruitment events offered. (Boeing)
- Varied options with modality: remote/onsite/hybrid. (All companies)
- More events later in the evening to reduce academic schedule conflicts.
- Coffee Chats (Cisco)
- Eliminated 3.0 GPA requirement for early stages (Cisco)
- More In-Person Sessions, expanded conferences, more hiring from intern pool (Lilly)
- Recruiters encouraged students to engage in project work beyond class projects, interviews went much better. (All companies).
- Two week mini-internships for early career students (Eli Lilly) This is an excellent idea fewer first year students get internships in the summer of year 1, more students available to participate! Since most first year students have not had the opportunity to build personal connections on campus, a direct application process may work better than a nomination based one.

