# Janet Jiang

jcj42@duke.edu

ORC ID: 0009-0003-3237-0751

## EDUCATION

**Duke University**                                                                                 Durham, NC
*Bachelor of Science*, Computer Science                                           08/2021 - 05/2025
- Dean's List with Distinction (Fall 2021, Spring 2022, Fall 2022, Spring 2023, Fall 2023)            GPA: 4.0
- Outstanding Undergraduate Teaching Assistant Award (Spring 2023)
- Charles & Janet Lambert Scholarship (Fall 2022, Spring 2023, Fall 2023, Spring 2024)
- George Grune Liberal Arts Scholarship (Fall 2022, Spring 2023)

## TECHNICAL SKILLS

**Programming Languages**: Python (fluent), SQL, R, Java, C (beginner)
**Tools and Frameworks:** Jupyter Notebook, GitHub, GitLab, Flask, MongoDB
**Libraries**: Pandas, NumPy, Seaborn, Matplotlib, SciPy, Scikit-Learn, PyTorch (beginner)

## RESEARCH EXPERIENCE

**Peer Instruction in Hybrid Courses**
Research Independent Study                                                         12/2023 - Present
- Identified and read papers on different hybrid course structures and the use of peer instruction in traditional, in-person classroom settings.
- Processed data from two offerings of an undergraduate data science elective.
- Conducted non-parametric tests to (1) evaluate the effectiveness of peer instruction at facilitating student learning across in-person and online modalities of a hybrid course, (2) observe how students' discussions between rounds of peer instruction relate to their learning gains and (3) identify whether these learning gains vary when courses follow different hybrid policies.
- Wrote a 16-page academic paper that was submitted to ICER 2024 and that will be used as the basis of my senior thesis.

**Diversity in Undergraduate Computing**
CRA UR2PhD Program                                                                 08/2023 - 12/2023
- Attended a research methods course that met for 2 hours/week over Zoom.
- Worked with another Duke undergraduate to evaluate the racial and gender diversity of students and undergraduate teaching assistants in four core CS courses, both independently and with respect to each other.
- Conducted a literature review to find potential measurements of racial diversity, processed and visualized 11 semesters of data, and performed linear regressions to observe trends in diversity over time.
- Co-wrote an academic paper that was presented to Duke CS faculty.

**Educational Data Analysis and Mining for Hybrid Classes**
Duke CS+ Summer Undergraduate Research Program                                     05/2023 - 08/2023
- Analyzed data from mid-semester surveys, peer instructions, and Zoom attendance logs to determine the relationships between student modality, peer instruction discussion, and class sentiment.
- Summarized my research team's findings as a poster that was accepted to ACM SIGCSE TS 2024.
- Presented the poster at the conference on behalf of my team.

## WORK EXPERIENCE

**Head Undergraduate Teaching Assistant**
*Duke University Computer Science Department, CS101*                               04/2023 - Present
- Participated in weekly meetings with professors and teaching staff and served as point of contact for undergraduate teaching assistants (UTAs).
- Wrote scripts to process and visualize data from office hours and the course's online discussion platform to confirm that the UTAs are fulfilling their duties and that the students are receiving help in a timely manner.
- Collected student feedback on coding assignments and updated the documentation for clarity.

- Created new interview questions for potential UTAs and designed detailed evaluation rubrics to standardize the interview process.
- Organized the UTA office hours schedule and informed the students of how to access help resources outside of lecture at the beginning of each semester.

**Associate Head Undergraduate Teaching Assistant**

*Duke University Computer Science Department, CS216*                                          08/2023 - 12/2023
- In addition to regular UTA duties, participated in weekly meetings with professors and teaching staff.
- Wrote scripts to process and visualize pre-class quiz data.
- Trained other teaching assistants on how to prepare and maintain the Gradescope autograder.

**Undergraduate Teaching Assistant**

*CS101 (CS1)*                                          08/2022 - 04/2023
- Hosted weekly consulting hours to review course concepts and help students debug programming assignments.
- Monitored Ed Discussion platform to ensure student questions are answered in a timely manner.
- Graded student labs, homeworks, and exams.
- Instructed a weekly lab section of 25-30 students.
- Sat in on lecture to help answer student questions and facilitate peer instruction usage.

*CS216 (Data Science Elective)*                                          01/2023 - 05/2023
- Designed unit tests and set up the autograder for homeworks/classwork.
- Graded student homeworks and exams.
- Provided students with feedback on open-ended, collaborative final projects.

*CS230 (Discrete Math)*                                          07/2023 - 08/2023
- Created and graded student homeworks.

**AP Macro/Microeconomics Tutor**

*Pano Education*                                          12/2021 - 04/2023

**College Consultant and SAT Tutor**

*Self-Employed*                                          08/2020 - Present

## Leadership Experience

**Drum Major**

*Duke University Marching and Pep Bands*                                          04/2022 - 05/2023
- Coordinated with the media team to run all home football/basketball games and select NCAA tournament games.
- Conducted pre-game and halftime shows and assisted section leaders and officers in teaching drill at tri-weekly rehearsals.

**Freshman Representative**

*Duke University Marching and Pep Bands*                                          09/2021 - 05/2022
- Served as the bridge between the leadership team and the freshmen by advocating for the freshman interest at biweekly officer meetings and answering questions related to game day logistics, rehearsal schedules, etc.
- Planned social events aimed at promoting unity within the freshmen.

## Publications

Salma El Otmani, **Janet Jiang**, Shao-Heng Ko, and Kristin Stephens-Martinez. 2024. *The Relationships Between Modality, Peer Instruction Discussion, and Class Sentiment in Hybrid Courses*. Extended Abstract at ACM SIGCSE Technical Symposium on Computer Science Education. SIGCSE '24.