

# Java Darleen Villano

## Curriculum vitae

University of Connecticut, Storrs  
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### Education

- 2019–present **Ph.D. in Mathematics**, *University of Connecticut*, Storrs, CT.  
*Advisors:* David Reed Solomon and Damir D. Dzhafarov
- 2015–2019 **B.A. Mathematics with Logic Minor**, *University of California, Berkeley*.

### Publications and Preprints

- 2022 **A tree of strategies proof of a result about relativized computable categoricity**, in preparation.  
We give a proof using a tree of strategies for the main result in Downey–Harrison–Trainor–Melnikov, 2021.

### Teaching Experience

- 2019–present **Teacher Assistant**, *University of Connecticut*, Storrs, CT.
- **Spring 2022:** Math 1132 (Calculus II)
  - **Fall 2021:** Math 1131 (Calculus I)
  - **Spring 2021:** Math 1132 (Calculus II)
  - **Fall 2020:** Math 1132 (Calculus II)
  - **Spring 2020:** Math 1132 (Calculus II)
  - **Fall 2019:** Math 1131 (Calculus II)
- Summer 2020 **Course Tutor for SSS Math Program**, *University of Connecticut*, Storrs, CT.

### Presentations

- Spring 2022 **Priority Arguments**, *AMS New England Graduate Student Conference*, Brown University, Providence, RI.  
Priority arguments have been a powerful tool since their introduction in providing an answer to Post’s problem in several areas in mathematical logic, such computability theory and model theory. We give a brief introduction to them and their different versions, and then cover some classical constructions. Afterwards, we will shift to their applications in computable structure theory in constructing certain examples in the study of the notion of relative computable categoricity.
- Spring 2019 **Instances of Incompleteness**, *Mathematics Directed Reading Program*, University of California, Berkeley.
- Fall 2018 **From Theorems to Axioms: An Introduction to Reverse Mathematics**, *Mathematics Directed Reading Program*, University of California, Berkeley.
- Fall 2018 **What is reverse mathematics?**, *Mathematics Undergraduate Student Association’s Math Mondays*, University of California, Berkeley.

Spring 2018 **An interpretation of classical arithmetic in constructive arithmetic**, *Mathematics Directed Reading Program*, University of California, Berkeley.