

## Regulated Research Institutional/Industrial Setting Form (1C)

This form must be completed AFTER experimentation by the adult supervising the student research conducted in a regulated research institution, industrial setting or any work site other than home, school or field.

Student's Name(s) **Natalie Cardoso**

Title of Project **First come, first served: How order and attention influence the choices we make**

**To be completed by the Supervising Adult in the Setting (NOT the Student(s)) after experimentation:**  
(Responses must be on the form as it is required to be displayed at student's project booth; please do not print double-sided.)

The student(s) conducted research at my work site:

1. Did you or your proxy (e.g. graduate student, postdoc, employee) mentor or provide substantial guidance to the student researcher? ☒ Yes ☐ No

- a. If no, describe your and/or your institution's role with the student researcher and his/her project (e.g. supervised use of equipment on site without ongoing mentorship and sign below.

- b. If yes, complete questions 2–5.

2. Is the student's research project a subset of your ongoing research or work? ☒ Yes ☐ No

Use questions 3, 4 and 5 to detail how the student's project was similar and/or different from ongoing research or work at your site.

3. Describe the independence and creativity with which the student:  
a. developed the hypotheses or engineering goals for the research project

Natalie and I discussed the research question and the approach in detail before she started the project. The approach Natalie used builds on previous work (Cavanagh, Wiecki, Kochar, & Frank, 2014), testing and extending computational models employed in this work based on a previously recorded dataset that controls for important aspects of the decision process.

- b. designed the methodology for his/her research project

Natalie's focus was on the implementation of the method and the identification of the model that best explained the data.

- c. analyzed and interpreted data

She very independently set up the relevant software tools and implemented the analyses independently based on example scripts from an unrelated previous study and based on theoretical discussions with me. We also jointly discussed the interpretation of the findings.

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## Regulated Research Institutional/Industrial Setting Form (1C) Continued

Student's Name(s) Natalie Cardoso

4. Detail the student's role in conducting the research (e.g. data collection, specific procedures performed). Differentiate what the student observed and what the student actually did.

Natalie analyzed a previously de-identified dataset by means of the hierarchical drift diffusion model (HDDM) software implemented in Python that allows for computational modeling of the mechanisms underlying decision-making as well as the assessment of how these mechanisms are altered by experimental variables on a trial-by-trial basis using linear regression.

Natalie independently set up the software and the general analyses structure based on example code from a previous study. Within the 6 weeks she spent in our lab, Natalie made herself familiar with Python, set up the analysis code and ran and compared 56 different computational models to identify the one that best explains the observed data.

Before visiting our lab, Natalie had no knowledge of Python, R, regression, or bayesian statistics, but she successfully built the required knowledge to successfully perform her project.

5. Did the student(s) work on the project as part of a group? ☐ Yes ☒ No  
If yes, how many individuals were in the group and who were they (e.g. high school students, graduate students, faculty, professional researchers)?

I attest that the student has conducted the work as indicated above and that any required review and approval by institutional regulatory board (IRB/IACUC/IBC) has been obtained. Copies are attached if applicable.  
I further acknowledge that the student will be presenting this work publicly in competition and I have communicated with the student research regarding any requirements for my review and/or restrictions of what is publicized.

Romy Froemer

Supervising Adult's Printed Name

Brown University

Institution

190 Thayer street, Providence, RI, 02912

Address

Romy Frömer

Signature

I hereby agree to this form  
and certify that it is my own work, and  
I am not a minor.

First name, last name: How order and attention influence the choices we make

Title

08/14/2019

Date Signed (must be after experimentation) (mm/dd/yy)

romy\_froemer@brown.edu

Email/Phone