# Constanza Inez C. de Dios, Ph.D.

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### **Summary**

Cognitive neuroscience-trained data analyst with background in human electrophysiological and behavioral research. Proficient in applied data analysis of clinical experimental and observational data. Enthusiastic project collaborator dedicated to systematic problem solving.

## **Highlights**

- O Data science approaches to analyzing physiological, behavioral, and genomic data
- O Design, code, and implementation of lab experiments with human participants
- o Data reduction and wrangling
- o Fluent in R
- o Basic proficiency in Python and SAS
- o Effective instructor and speaker

## **Experience**

#### Postdoctoral Research Fellow

Center for Neurobehavioral Research on Addiction Department of Psychiatry and Behavioral Sciences September 2019—Current University of Texas Health Science Center

Houston, Texas, USA

- O Analyze psychiatric, physiological, EHR, genomic, clinical data via generalized linear mixed models.
- Apply frequentist or Bayesian inference as appropriate in substance use, mood disorder, cognitive, and electrophysiological data.
  - o Contexts: randomized controlled trials, observational studies, and secondary analyses.
- o Identify most important predictors of substance misuse through machine learning.
- o Apply alternative statistical tools to non-experimental data such as generalized additive models, meta-analyses, and latent variable mixture models.
- o Process and analyze running cumulative total 36 MB (450k observations, 4k variables) across projects.

#### Graduate Researcher and Instructor

September 2013—August 2019 University of South Florida Tampa, Florida, USA

Cognitive Electrophysiology and Clinical Neuroscience Lab Department of Psychology

- Applied electrophysiological methods in studying reward salience and visual attention.
- o Signal-processed a cumulative 120GB of EEG sensor data from 300 human participants over five separate experiments.
- Analyzed sensor data using principal components analyses and repeated-measures analyses of variance (resulted in 9 poster presentations).
- o Supervised 8 students in signal-processing 56GB electrophysiological data.
- o Crafted and delivered in-person course lectures and learning assessments for 45 students every semester as lab instructor and instructor of record.

## **Education and Training**

Postdoctoral Fellowship

Psychiatry, University of Texas Health Science Center

September 2019—Current Houston, Texas, USA

**Doctor of Philosophy** 

Psychology, University of South Florida

September 2013—August 2019 Tampa, Florida, USA

**Bachelor of Science** 

Psychology, St. Mary's College of California

September 2008—May 2012 Moraga, California, USA