

Chicago, Illinois

□847770-1061 | Savangray@gmail.com | Oavangray | Cavangray

# **Professional Summary**

I'm a published researcher with expertise in R, statistical analysis, measurement and employment selection. I have experience leading domestic and international testing programs for multiple clients and guiding them through the legal and ethical landscape of psychometric testing. I enjoy taking creative approach to challenging problems and sharing research and ideas with all audiences.

## Education

**University of Georgia** Athens, Georgia

PhD and MS in Industrial-Organizational Psychology

Aug. 2012 - May 2018

· Dissertation: Improving Organizational Research: A case for Multidimensional Item Response Theory

**Western Illinois University** 

Macomb, Illinois

BS (Hons) in Psychology

Aug. 2009 - May 2012

• Department scholar of psychology

# Experience\_

**Pearson VUE** Chicago, Illinois

PSYCHOMETRICIAN Mar. 2019 - Present

· Engaged in all activities of Associate Psychometrician with a greater empahsis on research and thought leadership

Chicago, Illinois

ASSOCIATE PSYCHOMETRICIAN

PSYCHOMETRIC CONSULTANT

360 FEEDBACK COACH

Dec. 2016 - Mar. 2019

- · Lead the statistical analysis of several international and domestic professional certification exams using item response theory and classical test
- · Identified trends using regression and correlations, presented findings and implications to clients
- · Summarized analyses in technical reports and presented findings and recommendations to examination supervisory boards
- · Created statistical programs to manage multiple large datasets using R and Microsoft Access for reproducible and expedited report creation
- Lead job analyses workshops and surveys to validate newly developed exams · Conducted and presented research on improving job analysis using natural language processing and multidimensional item response theory
- **APTMetrics** Darien, Connecticut

Jul. 2016 - Dec. 2016 CONSULTANT

- Performed a meta-analysis of employee selection tool performance across seven locations to present as expert witness testimony
- Conducted adverse impact and pay equity analyses for several Fortune 500 organizations
- · Performed regression and correlation analysis to support the criterion validation of a new situational judgement test
- Developed a family of competency models using interview and survey methodology

Go Metrics Athens, Georgia

· Lead the development and validation of two vocational interest inventories to be used in employee selection

Frito-Lay

Plano, Texas

Jan. 2016 - Jul. 2016

#### ORGANIZATION AND MANAGEMENT DEVELOPMENT INTERN

Jan. 2015 - Dec. 2015

- Lead the analysis of human resource data for 12 jobs, over a 4-year period and 800,000 applicants. Recommendations for reducing turnover and increasing diverse applicants were presented to senior HR leaders.
- Supported an organization wide administration and analysis of an organizational culture survey and quartley pulse surveys
- · Played a primary role in conducting the analyses that lead to the successful defense of an adverse impact OFCCP audit
- Developed various Excel tools using macros and complex formulae to help facilitate data collection from HR Business Partners

### Carl Vinson Institute of Government - Survey Research and Evaluation Unit

Athens, Georgia Jan. 2014 - Dec. 2015

• Supported the implementation, collection and analysis of large-scale public policy research

RaceTrac Petroleum

Atlanta, Georgia Nov. 2013 - Dec. 2013

• Facilitated developmental 360 performance evaluations for mid-and high-level managers

APRIL, 2019 CAVAN GRAY · CURRICULUM VITAE

## **Research & Publications**

## **SELECTED PUBLICATIONS**

GRAY, C. J., CARTER, N. T., & SEARS, K. L. (2016). THE UWBQ-I: AN ADAPTATION AND VALIDATION OF A MEASURE OF INSTIGATED INCIVILITY. JOURNAL OF BUSINESS AND PSYCHOLOGY, 1-19.

EBY, L. T., MITCHELL, M. E., GRAY, C. J., PROVOLT, L., LORYS, A., FORTUNE, E., ALLEN, T. D., & GOODIE, A. (2014).

GAMBLING-RELATED PROBLEMS IN FAMILY AND WORK LIFE: AN EXPLORATORY STUDY OF WEEKLY GAMBLERS. COMMUNITY, WORK, & FAMILY, 1-17.

#### **SELECTED PRESENTATIONS**

GRAY, C. J., BECKER, K. A. (2018). AUTOMATING JOB TASK ANALYSIS WITH NATURAL LANGUAGE PROCESSING. PAPER PRESENTED TO THE 2017 SOCIETY FOR INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (SIOP) ANNUAL CONFERENCE, CHICAGO, IL.

GRAY, C. J., LAUTENSCHLAGER, G. J., & CARTER, N. T. (2017). IMPROVING MEASUREMENT PRECISION IN ORGANIZATIONAL RESEARCH: A CASE FOR MULTIDIMENSIONAL ITEM REPONSES THEORY. PAPER PRESENTED TO THE 2017 SOCIETY FOR INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (SIOP) ANNUAL CONFERENCE, ORLANDO, FL.

GRAY, C. J., MORELLI, N. A., & MCCLANE, W. (2015). DOES USE CONTEXT AFFECT SELECTION ASSESSMENTS DELIVERED VIA MOBILE DEVICES? PAPER PRESENTED TO THE 2015 SOCIETY FOR INDUSTRIAL/ORGANIZATIONAL PSYCHOLOGY (SIOP) ANNUAL CONFERENCE, PHILADELPHIA, PA.

Gray, C. J., Carter, N. T., & Sears, K. (2015). The UWBQ-I: The Validation of a Measure of Instigated Incivility. Paper presented to the 2015 Society for Industrial/Organizational Psychology (SIOP) Annual Conference, Philadelphia, PA.

### **COMPETITIONS & RELEVANT COURSEWORK**

2018 Titanic Machine Learning, Top 8%2018 Machine Learning, Stanford University

Kaggle.com Coursera