

ANDREW ITHURBURN

a.ithurnburn@sms.ed.ac.uk · [Website](#) · [LinkedIn](#) · [Github](#)

EDUCATION

The University of Edinburgh Edinburgh, Scotland

Sep 2019-Present

Psychology PhD

Dissertation: The Psychology of Risky Sexual Decisions: Power Desires, Attachment Style, and Sexual Choices

California State University, Chico Chico, California, United States

Master of the Arts: Option in Psychological Science

Thesis: Thinking of the future: Effects of episodic future thinking on sexual decision making

Fall 2017-May 2019

California State University, Chico Chico, California, United States

Bachelor of the Arts: Psychology Autumn 2012-Spring 2016

Minor: Biological Sciences

SKILLS

Languages and Tools - Python, R, Javascript, Github Actions, Quarto

EXPERIENCE

Dynata Aug 2022-Present

Data Scientist, Ad Solutions Herndon, VA

- Built diff-in-diff and multi-touch attribution **model codebase** in Python(OOP) for Ad Data Science Team and spec requesting these studies for Research Team. This code base has saved 100+ hours and brought in \$100,000s in revenue.

Morning Consult Nov 2021-Aug 2022

Senior Data Analyst Washington, D.C.

- In conjunction with other data scientists on a large project, developed and performed statistical tests on time series data in 17 surveys of 5 countries in over 200 tables
- Led project to build a Python Web Bot (Selenium) to automate generation of test cases in surveys, contributed this to data science code base (used by 60+ data scientists), saving company \$10,000s in time and errors
- Over 300+ requests, pulled data from API or large database into R, wrangled data using R, and output figures and tables

Echelon Insights April 2020-Nov 2021

Research Analyst Alexandria, VA

- Led in modeling projects predicting election turnout for entire U.S. in 2022, phone response rates, etc.
- Wrangled, cleaned, weighted, or made presentations for 60+ survey datasets with R, SQL, and AWS
- Using R Shiny, built a codeless-crosstab tool for company's research team

Center for Elections and Democracy Dec 2018-April 2020

Undergraduate Research Fellow Provo, UT

- Designed and executed multiple survey experiments in original research projects
- Mentored 60+ students in solving econometrics problems in weekly office hours
- Visualized data using R creating 50+ informative figures for the AFS official report, news outlets, and professor's projects

PERSONAL PORTFOLIO PROJECTS

Predicting AirBnB Bookings with Apache Spark

December 2022

- Coded a full data-pipeline using **ONLY Apache Spark** (PySpark): wrangling and joining data, EDA, feature engineering, model selection with a grid search (Lasso, Ridge, Naive Bayes, Random Forest, GBT), model evaluation, and full project write-up and analysis

CNN Classification of Urban Sounds

December 2022

- Extracted features such as MFCC, Chromagram, Spectral Contrast from 8000+ audio clips using Python
- Estimated models custom and popular CNN architectures (AlexNet, GoogLeNet, etc.) using Tensorflow and Keras
- Full project write-up and code on Github

Bayesian County-Level School Shooting Analysis

August 2022

- Compared and estimated several Bayesian Regression models with PYMC3 in Python. Ultimately, used hierarchal negative binomial model to predict shootings and make inferences about gun laws