# JAMES BAIN

# Computational Anthropologist

@ jamescbain@mizzou.edu 

## **EDUCATION**

2019	Ph.D. Anthropology, University of Missouri
2015	M.A. Anthropology, University of Missouri
2012	<ul><li>B.A. Anthropology, University of Missouri</li><li>B.A. French, University of Missouri</li></ul>

ACADEMIC APPOINTMENTS	
GRADUATE RESEARCH ASSISTANT University of Missouri	
CHAOSS Project, Open Source Software Health	May 2018 - Present
> Sloan Foundation Grant	
Data Science and Analytics Master's Program	MAY 2016 - MAY 2018
> Instructor for DSA 7600, Introduction to Data Science & Analytics	
Department of Plant Science, Corn Genetics & Breeding Lab	May 2014 - Aug 2014
Department of Psychology, Social Cognitive Neuroscience Lab	JAN 2013 - AUG 2013
GRADUATE INSTRUCTOR University of Missouri	
ANTHRO 2050, Introduction to Biological Anthropology Lab	AUG 2015 - MAY 2016
Invited Graduate Researcher Université Montpellier II, France	
Department of Human Evolutionary Biology	OCT 2013 - APR 2014
GRADUATE TEACHING ASSISTANT University of Missouri	
ANTHRO 4580, Evolutionary Medicine	AUG 2014 - DEC 2014
ANTHRO 2580, Evolution of Human Sexuality (2 Semesters)	Spring 2013 & Fall 2015

### **PUBLICATIONS**

### **CONFERENCE PAPERS**

Bain J & S Goggins. (2018) Mining linguistic diversity as a signal for identifying regions likely to adapt to the changing nature of work. Work in the Age of Intelligent Machines at ACM GROUP. Sanibel Island, FL, USA.

### In Preparation

**Bain J**, S Goggins & R Walker. (2018) Non-linear scaling of diversity in cities: bayesian analysis of migrant language communities across the United States.

**Bain J**, S Goggins & R Walker. (2018) Scaling behavior of anti-immigrant sentiment: using Twitter to understand the linguistic geography of predjudice.

Bain J, L Cowgill (2018) Rodeo riders redux: a second look at Neandertal patterns of trauma.

### **OTHER PUBLICATIONS**

Bain J (2015) Is 2d:4d a stable trait during child development? (Masters Thesis).

### **PRESENTATIONS**

#### CONFERENCE PRESENTATIONS

**Bain J** & L Cowgill. (2017) Rodeo riders revisited: a second look at neandertal patterns of trauma. Presented at the 86th American Association of Physical Anthropology. New Orleans, LA, USA.

### **SOFTWARE**

#### **LOVELACE** → github.com/jcbain/lovelace

2018

Lovelace is a convolutional neural network designed to learn the semantics of short, unstructured text, such as Tweets. Models can be trained to classify the sentiment, author or category of text given the appropriately labelled training data.

(Python 3) (Tensorflow) (Pandas) (Numpy)

#### **HATERZMAPPER** → github.com/jcbain/haterzmapper

2018

Haterz Mapper extends subsetting functionality of geometric simple features for simpler geographic analysis. This includes integrating with US Census API wrapper, tidycensus, to provide further data collecting capabilities.

R (tidycensus) sf dplyr

#### **CUTTLEFISH** → github.com/jcbain/cuttlefish

2018

Cuttlefish is a color palette creator in which palettes can be created by supplying an image. Colors are selected by evenly spacing out colors on the color hue wheel.

#### R (colorspace magick

#### **HDI FORECASTER** → hdiforecaster.shinyapps.io/global\_dev/

2018

A Shiny application designed to visualize the Human Development Index, and indicator of human development within a nation, and its regional forecasted trajector into 2030. This forecast modelled off of the ARIMA algorithm.

R Shiny ggplot2

### **MEDIA**

**SCIENCE NEWS** (MAY 2017) Water tubing accidents, table run-ins cause neandertal-like injuries by BRUCE BOWER.

**ARCHAEOLOGY** (MAY 2017) Can fossil fractures be linked to Hominin behavior.

INVERSE (MAY 2017) Water tubing mishaps look a lot like Neanderthal injuries by SARAH SLOAT.

### OTHER EXPERIENCE

**DATA ANALYST** Universal Research Solutions, LLC

JUNE 2017 - PRESENT

**QUALITY ASSURANCE SPECIALIST** Universal Research Solutions, LLC

MAY 2015 - JUNE 2017

### **LANGUAGES**

### **SPOKEN**

English (maternal)

French (proficient in speaking, reading and writing)

### PROGRAMMING & DATABASE

Python • • • • •

**Q**R • • • • •

■JavaScript • • • • •

PostgreSQL • • • • •

MySQL • • • •

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