

# KAIRSTEN FAY

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## WORK EXPERIENCE

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### DATA ANALYST, FEB 2017 – PRESENT

#### INSTITUTE FOR HEALTH METRICS AND EVALUATION, SEATTLE, WA

- Built a machine learning library to improve epidemiological predictions in data-sparse areas for multiple risk factors. Increased model performance 50%-100% on average from old statistical methods and gained approval from the IHME scientific council.
- Improved the ETL pipeline code. Updated it to process data more quickly and altered the extraction process reducing extraction time by 20% and saving 600 hours of Data Analyst time
- Pioneered the use of dynamic dashboards for story prototyping and data validation, replacing static graphs and saving 300 hours of Data Analyst time.
- Performed statistical data analysis and data visualization for internal and external communications including publications and press releases

### DATA TECHNICIAN, JAN 2015 – SEP 2016

#### NC STATE UNIVERSITY, RALEIGH, NC

- Created an unprecedented, geospatial data set using literature review and museum collections to research the shifting winter coat color distribution of animals worldwide due to climate change.
- Publicized the dataset by building a visualization dashboard on Tableau public.
- Increased data coverage by 15% by recruiting collaborators' help at inaccessible museums.

## EDUCATION

### PROFESSIONAL DEVELOPMENT, MAR 2018 – PRESENT

#### UNIVERSITY OF WASHINGTON

3.9 GPA. Coursework in Computer Programming

### B.S. BIOLOGY, CONCENTRATION IN ECOLOGY, EVOLUTION, AND CONSERVATION, MAY 2015

#### NC STATE UNIVERSITY

4.0 GPA. Calculus and chemistry tutor. Certificate in ArcGIS Desktop.

## SKILLS

- Languages: Python, R, Java, MySQL, JavaScript, HTML/CSS
- Libraries: Scikit-Learn, Pandas, NumPy, Tidyverse, Seaborn, Matplotlib, NLTK, Flask, Django, Caret
- Technologies: Tableau, Superset, Git, Docker, Azure, Git, Unix

## SELECTED PUBLICATIONS

- Co-author: Winter Coat Color Polymorphisms Identify Global Hotspots for Evolutionary Rescue from Climate Change. **Science**. 2018.
- Co-author: Global Burden of Disease risk factors capstone. **The Lancet**. 2017.