

KARLA FETTICH, PHD

I am enthusiastic about using my skills, expertise and 10+ years of healthcare analytics experience to make a lasting positive impact in the community. Professionally, I develop analytics and machine-learning approaches to improve health care solutions. Personally, I serve as a volunteer leader of efforts to [increase diversity in the Philadelphia data science community](#) and provide analytics insights to non-profit organizations in the greater Philadelphia area through [datathons](#) and [software product development](#).

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CONTACT

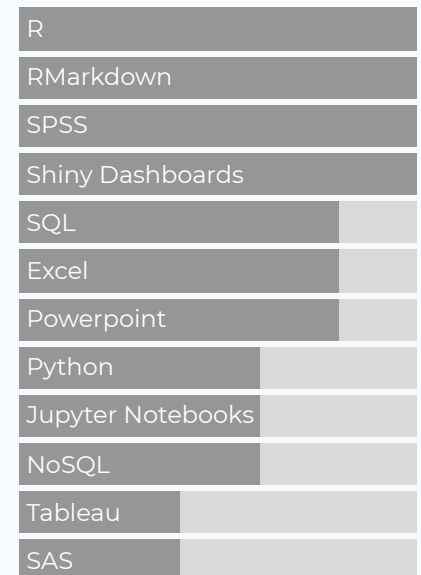
✉ kfettich@gmail.com

🐦 [kfettich](https://twitter.com/kfettich)

📄 github.com/kfettich

I speak several languages including German (native), Romanian (native), French (basic) and Spanish (basic).

TECHNICAL SKILLS



EDUCATION

- 2016 | 2011**
● **PhD, Psychology Neuroscience**
Temple University 📍 Philadelphia, PA
 - Dissertation: [Coordinated neuromorphology in the development of social information processing](#)
 - Advanced Training Institute on Exploratory Data Mining in Behavioral Research
- 2009 | 2008**
● **MA, Social Sciences (Psychology)**
The University of Chicago 📍 Chicago, IL
 - Thesis: [Predictors of Suicidality: Experiences of weight-related stigma in candidates for bariatric surgery](#)
- 2005 | 2002**
● **BA, Psychology**
Jacobs University Bremen 📍 Bremen, Germany

HEALTHCARE ANALYTICS EXPERIENCE

- present | 2021**
● **Senior Data Scientist**
AmeriHealth Caritas 📍 Newtown Square, PA
 - Developed machine learning models in R for risk stratification of CHC members, including both modifiable and non-modifiable risk factors
 - Conducted exploratory data mining analyses, created insights decks and presentations to internal clients, and led a collaborative analytics project
 - Improved analytics efficiency by reducing meeting overhead, automating workflows, developing solutions to move away from legacy systems, and coordinating with other teams to facilitate access to needed tools
 - Led knowledge-sharing sessions on modern tools in data science for colleagues across multiple teams

2021
|
2015

● **Head of Analytics & Algorithm Development**

Orchestrall, Inc.

📍 Conshohocken, PA

- Lead healthcare data science consulting projects to derive insights from clinical data and multidisciplinary teams
- Develop and test predictive models for operational implementation
- Select optimal tools for statistical modeling, including decision trees, logistic regression, conditional inference forests, multiple imputation
- Develop algorithms to power intelligent healthcare applications for the senior care market, including outcome prediction, anomaly detection, and logistics optimization; our solution earned the [Excellence in Technology Award for Dignity in Long-Term Care](#)
- Conduct end-to-end analyses including study design, data identification/collection, ETL, analysis, and communication of findings
- Implement analytical models into production through collaborations with the software development team

2016
|
2013

● **Graduate Research Assistant**

Neurocognition Lab

📍 Temple University

- Introduced and applied machine learning techniques (e.g. support vector machines, multivoxel pattern analysis, graph theory, network analysis) and high performance computing tools
- Assessed new data sources for value creation, attracting new research opportunities through a large, multi-site research network
- Evaluated and communicated technical advantages and tradeoffs between statistical models
- Solved difficult, non-routine analysis problems using large, complex data sets

2013
|
2011

● **Graduate Clinical Research Assistant**

Mechanisms of Affect Dysregulation Lab

📍 Temple University

- Supported and executed a wide range of clinical psychology studies including survey research, clinical treatment trials, neuroimaging studies, and secondary data research
- Designed and conducted a neuroimaging research study assessing affective risk factors in clinical populations
- Collaborated with the research coordinator, graduate and undergraduate students, as well as researchers from other sites to deliver high-quality peer-reviewed publications and academic conference presentations

2011
|
2009

● **Lead Clinical Research Coordinator**

Adult Eating and Weight Disorders Clinic

📍 The University of Chicago

- Planned and conducted statistical analyses of cross-sectional, time series, epidemiological, health outcomes and clinical data
- Optimized clinical participant recruitment and retention through data analytics
- Coordinated recruitment, screening, intake, assessment, treatment and follow-up stages several research projects, including a large NIMH-funded clinical trial and pilot studies using psychophysiological data (fMRI, RSA)
- Contributed to manuscript preparation for peer-reviewed publications and gave conference presentations

I have extensive experience with academic research, including clinical trials and studies using neuroimaging and psychophysiological data.



LEADERSHIP

present
|
2019



Project Leader

PAWS Data Pipeline

📍 Philadelphia, PA

- Lead a team to create a [360-degree view of PAWS' constituents](#) to help development and operations
- Work closely with project management team, peer data scientists, engineers, developers and Philadelphia Animal Welfare Society representatives to build a data lake
- Oversee team efforts in data processing, cleansing, and verifying data integrity

present
|
2018



Organizer & Board Member

R-Ladies Philadelphia

📍 Philadelphia, PA

- Work to increase gender diversity in the data science community in Philadelphia
- Create learning, networking and leadership opportunities for over 1500 members via monthly meetups focused on R and collaborations with other data groups in the city

present
|
2018



Lead Datathon Organizer

Collaborate with non-profit organizations to articulate business questions, translate them into viable analytics projects for volunteer data scientists; coordinate the volunteer effort, and help data scientists translate their findings into clear and actionable business insights

📍 Philadelphia, PA

- Philadelphia Animal Welfare Society: [Animal Shelter Volunteer Engagement \(2018\)](#) and [Animal Adoptions \(2019\)](#)
- Health Federation of Philadelphia, Prevention Point, the City of Philadelphia: [Opioid Epidemic \(2020\)](#)
- Judge Accountability Table: [Judicial patterns in Philadelphia courts \(2021\)](#)

I enjoy learning via hands-on projects that have a real and positive impact, and I seek to create opportunities to make this type of learning available to the wider community.



TEACHING

2014



Graduate Teaching Assistant and Lab Instructor

Statistics

📍 Temple University

- Taught weekly introductory statistics lab sections (75 undergraduate students) with positive student feedback
- Provided one-on-one tutoring and exam preparation on an as-needed basis
- Administered and corrected exams and liaised between students and the course instructor



CONTINUING EDUCATION

present
|
2021



Health Insurance

AHIP

📍 Online

- Professional, Health Insurance Advanced Studies (in progress)

2021



Data Science

Coursera

📍 Online

- Microsoft Azure Machine Learning Studio: [Predictive Modeling](#), [Machine Learning Pipelines](#), [Deep Learning Inference](#)
- Causal Inference: [Inferring Causal Effects from Observational Data](#)



VOLUNTEER WORK

present
|
2016



Volunteer, Mentor

[Philadelphia Animal Welfare Society \(PAWS\)](#)

📍 Philadelphia, PA

present
|
2018



Organizer & Board Member

[R-Ladies Philadelphia](#)

📍 Philadelphia, PA

present
|
2019



Project Leader

[Code for Philly](#)

📍 Philadelphia, PA



SELECTED PUBLICATIONS

2019



[The interactive effects of peers and alcohol on functional brain connectivity in young adults](#)

2017



[At risk of being risky: The relationship between “brain age” under emotional states and risk preference](#)

2016



[Amygdala hyperactivation to angry faces in intermittent explosive disorder](#)

2014



[Emotion regulation deficits in intermittent explosive disorder](#)

2013



[Loneliness mediates the relationship between emotion dysregulation and bulimia nervosa/binge eating disorder psychopathology in a clinical sample](#)

2012



[Coping With Obesity Stigma Affects Depressed Mood in African-American and White Candidates for Bariatric Surgery](#)

2012



[Correlates of Suicidal Ideation and/or Behavior in Bariatric-Surgery-Seeking Individuals With Severe Obesity](#)

2012



[Factors Associated with Suicide Ideation in Severely Obese Bariatric Surgery-Seeking Individuals](#)

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[CV Source Code](#).

Last updated on 2021-09-02.