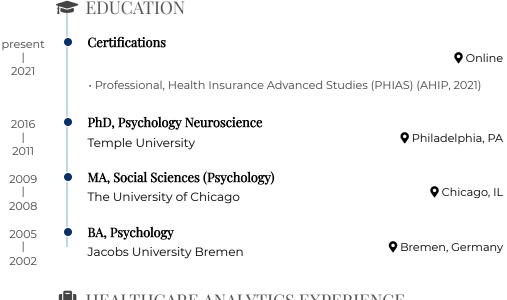
# KARLA FETTICH, PHD

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.



## **III** 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

**♣** Download a PDF of this CV

#### CONTACT

- kfettich at gmail dot com
- github.com/kfettich

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

#### TECHNICAL SKILLS

TEGITIVE DIVIELD		
R		
Shiny Dashboards		
SQL, NoSQL		
MS Office (Excel, PPT, etc.)		
Azure (Synapse, ML Studio)		
Python		
Jupyter Notebooks		
PowerBI		
Tableau		
SAS, SPSS		

2021 | 2015

### Head of Analytics & Algorithm Development

Orchestrall, Inc.

Onshohocken, 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
- $\boldsymbol{\cdot}$  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 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.



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
- $\cdot$  Administered and corrected exams and liaised between students and the course instructor

# **CONTINUING EDUCATION**

#### Microsoft Azure

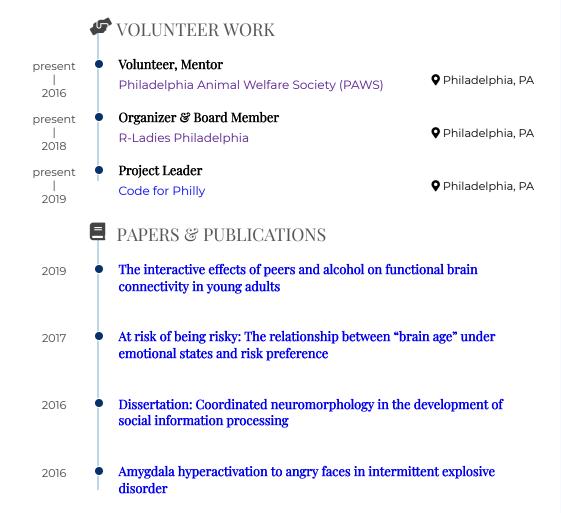
- DP-900T00: Microsoft Azure Data Fundamentals Program (2021)
- Predictive Modeling (2021), Machine Learning Pipelines, Deep Learning Inference, Build Random Forests in R with ML Studio (2021)

#### Data & Analytics

- · Inferring Causal Effects from Observational Data (2021)
- Advanced Training Institute on Exploratory Data Mining in Behavioral Research (2013)

#### Project Management

· Structuring Machine Learning Projects (2021)



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 clinica 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
2009	•	MA Thesis: Predictors of Suicidality: Experiences of weight-related stigma in candidates for bariatric surgery