# MILES TURPIN

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#### **EDUCATION**

Duke University expected May 2020

B.S. in Data Science, B.S. in Mathematics, Minor in Philosophy — Cumulative GPA: 3.3

- · Relevant coursework: High Dimensional Data Artificial Intelligence Data Science Statistics Databases Algorithms Data Structures & Algorithms Advanced Probability Discrete Math Linear Algebra Multivariable Calculus Complex Systems @ MIT
- · Spring coursework: Machine Learning (Graduate level) Bayesian Statistics

#### Honors

· Judge's Pick at American Statistical Association DataFest at Duke

Spring 2018

 $\cdot$  Best Insight at American Statistical Association DataFest at Duke

Spring 2019

#### **EXPERIENCE**

#### Carin Research Group, Information Initiative at Duke (iiD)

June 2018 - Present

Machine learning researcher

Duke University

- · Building machine learning models on time series EHR data to predict likelihood of emergency surgery for patients with a severe stomach complication (SBO), advised by Dr. Lawrence Carin and Dr. Matthew Englehard. *Paper forthcoming*.
- · Compiled the largest and most detailed dataset of SBO patients for analysis.

#### Future of Humanity Institute, University of Oxford

May 2018 - Sept 2018

Machine learning researcher

- · Used machine learning to identify lab-specific signatures of engineered DNA to predict its lab-of-origin. Paper forthcoming

  Plasmid Attribution: Toward Accountability in Genetic Engineering.
- · Beat the state-of-the-art by 20 points (68% accuracy).
- · Leveraged AWS for parallel web scraping and model training

### Industry Activity by US Metropolitan Area

April 2018

Team lead

Duke University

- · Identified industry hotspots across US metropolitan areas using job posting data from Indeed; see Github.
- · Awarded Judge's Pick at American Statistical Association DataFest at Duke. Competed against over 400 students, over half of which were Master's students.

#### **Predicting Seasonal Fatigue**

April 2019

Team lead

Duke University

- · Built personalized models for each player on the Canadian National Women's Rugby Team to understand each individual's predictors of fatigue over the course of the season; see Github.
- · Awarded Best Insight at American Statistical Association DataFest at Duke. Competed against over 400 students.

### Effective Altruism: Duke

Spring 2017 - Present

President

 $Duke\ University$ 

· Created and currently run the first iteration of the Arete Fellowship, a selective program offering an accelerated introduction to Effective Altruism for students who are motivated to think rationally about how to have a significant positive impact on the world. See *eaduke.org/faq*.

#### TECHNICAL SKILLS

Programming Languages Software & Packages Python, R, SQL, Scheme

Tensorflow, Scikit-learn, Pandas, Numpy, Git, Tableau

## ACTIVITIES

Philosophy Society

 $Exec\ Member$ 

Spring 2017 - Present Duke University

 $\cdot$  Organized a discussion between two prominent philosophers on the existence of God, attended by 100+ students.

Duke Triathlon Fall 2017 - Present

 $\cdot$  Completed an Ironman 70.3 in Patagonia in March 2018.