

EXPERIENCE

IBM, Washington D.C.

Advanced Analytics Consultant, September 2018 to Present

- Identified clusters of fraudulent tax return preparers for the IRS using network analysis algorithms and linked clustering techniques, protecting over \$300M in taxpayer revenue
- Created visualizations of potential business tax fraud using an exploratory data analysis approach

AI Ethics Researcher, January 2019 to Present

- Created a framework and business case for implementing a concerted effort to address AI Bias in IBM's public sector practice, earned executive buy-in, and started a team to address algorithmic bias at IBM
- Developed a curriculum to address AI bias issues in design thinking workshops and new hire orientation

PriceWaterhouse Cooper (PwC), New York City

Data & Analytic Technology Consultant, June 2017 to August 2017

- Assisted the IT teams as two pharmaceutical companies merged and transitioned to a hybrid data lake and data warehouse architecture, saving over \$60M in overhead cost
- Wrote and won a proposal to implement an NLP job-matching algorithm for a popular career search site

University of Colorado, Colorado Springs

Artificial Intelligence Researcher, May 2016 to August 2016

- Classified walking speed with 98% accuracy, using a variety of neural networks and Self Organizing Maps
- Completed a 3-month faculty-lead course on machine learning and deep learning techniques

PROJECTS

Department of Labor (DoL), Washington, D.C.

Watson Knowledge Studio Developer, December 2018 to Present

- Built out a program to use Natural Language Processing (NLP) to personalize job-matching for U.S. veterans as part of IBM's Emerging Leaders Program

IBM Center for the Business of Government, Washington, D.C.

AI Policy Writer, September 2018 to Present

- Wrote about the effect of AI on U.S. government agencies and technical policy solutions to AI disruption

Nittany Data Labs, State College, PA

Board Member, January 2016 to May 2018

- Helped start Penn State's first data science organization, which taught introductory Python to students and partnered with industry sponsors like Nestle and Disney on data science projects

PUBLICATIONS

Kennedy, A. *Using Computational Narratology to Solve the Artificial Intelligence Value Alignment Problem*. Honors Thesis. The Pennsylvania State University, 2018. Web.

Kennedy, A. and Lewis, R. *Optimization of Neural Networks for Biomechanic Classification with Electromyogram Input*. International Journal of Artificial Intelligence & Applications, vol. 7, no. 5, pp. 1-16, 2016.

SKILLS

Programming Software

SQL, Python, MATLAB, SAS, LaTeX, Java, JavaScript, HTML, CSS, Perl
Watson Studio, Tableau, Advanced Excel, SAS Enterprise Miner, SolidWorks, pgAdmin

EDUCATION

The Pennsylvania State University

B.S. Engineering Science | Schreyer Honors College

University Park, PA

August 2014 – August 2018

- **GPA: 3.7 / 4.0**
- Relevant Coursework: Complex Analysis, Numerical Computations, Linear Algebra, Multivariable Calculus