

Kelechi M. Ikegwu, Ph.D.

ikegwu.com • Greensboro, NC • kelechi.ikegwu@gmail.com

EXPERIENCE

University of Illinois Urbana-Champaign Champaign, IL
Research Fellow at the Laboratory of Computation, Data, and Machine Learning 08/2016 – 05/2021

- Outperformed ubiquitous benchmark models in forecasting profitability in financial accounting research settings with Random Forest models
- Developed an open-source Python library called [PyIF](#) in an agile fashion to estimate information transfer; PyIF is [up to 1,072 times faster than any existing implementation](#)
- Mentored and led several undergraduate researchers during the development of PyIF
- Discovered new deterministic behavior between companies in the S&P 500 that are not captured by common assumptions in finance

University of Illinois Urbana-Champaign Champaign, IL
Graduate Teaching Assistant 08/2016 – 08/2018

- Taught discussion sections, hosted office hours, and created interactive assignments with Jupyter notebooks for hundreds of college students
- Designed a [website](#) for the College of Business about the Foundations of Data Analytics for accounting students

Airforce Research Laboratory Dayton, OH
Intern 06/2016 – 08/2016

- Determined that synthetic data is useful for transfer learning with deep convolutional neural networks for militarized applications

NASA Jet Propulsion Laboratory Pasadena, CA
Interstellar and Heliospheric Physics Intern 06/2015 – 08/2015

- Improved efficiency by developing an interface with Python to automate retrieving AGB star data from Astronomy databases

NASA Ames Research Center Mountain View, CA
Intelligent Systems Intern 06/2014 – 08/2014

- Prevented \$500,000 in water heating damages with a biologically inspired machine learning model that detected the need for repairs

SKILLS

- Programming: Python (pandas, numpy, scipy, sci-kit learn, TensorFlow), R, C#, and C++
- Machine Learning: Linear and Logistic Regression, decision trees, support vector machines (SVM), random forest, and neural networks
- Data visualization: matplotlib, seaborn, d3.js, ggplot2, and Excel
- Tools: Linux, git, jekyllrb, Jupyter, latex, and markdown

EDUCATION

Doctor in Philosophy in Informatics Graduation Date: May 2021
University of Illinois Urbana-Champaign GPA: 3.73/4.00

Bachelor of Science in Information Technology Graduate Date: May 2016
North Carolina A&T State University GPA: 3.9/4.0