

# Kelechi M. Ikegwu

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<b>Objectives</b>	My overall objectives are to obtain a Ph.D. in Informatics and secure a job in the field of data science.
<b>Education</b>	<b>University of Illinois at Urbana-Champaign – Champaign, IL</b> PhD in Informatics. <b>Cumulative GPA: 3.73/4.0</b>  <b>North Carolina Agricultural and Technical State University – Greensboro, NC</b> BS in Information Technology; minor in Applied Mathematics. <b>Cumulative GPA: 3.9/4.0</b>
<b>Experience</b>	<b>Laboratory for Computation, Data, and Machine Learning: Researcher (August 2016 – Present)</b> <ul style="list-style-type: none"><li>• Developed Standard Machine Learning Language (<a href="https://lcmdm-uiuc.github.io/sml/">https://lcmdm-uiuc.github.io/sml/</a>) which attempts to automate parts of machine learning using SQL like queries (2016-2017)</li><li>• Used Machine Learning to predict profitability of firms which resulted in a publication [1] (2017-Present)</li><li>• Developed an open source implementation to estimate Transfer Entropy which is up to 1072 times faster than existing implementations. The work from this bullet resulted in a publication [2] (2019)</li><li>• Identified deterministic behavior between firms in financial markets utilizing an information measure called Transfer Entropy (2019-Present)</li></ul> <b>University of Illinois: Graduate Teaching Assistant (August 2016 – August 2018)</b> <ul style="list-style-type: none"><li>• Courses: ACCY 570 (Foundations of Data Analytics), ACCY 571 (Statistical Analyses for Accountancy), and INFO 490 (Advanced Data Science)</li><li>• Held discussion sections, hosted office hours, and developed quizzes/assignments</li><li>• Developed a website about ACCY 570 using Jekyll and GitHub Pages for the University of Illinois: <a href="https://uidfcb.github.io/570a/">https://uidfcb.github.io/570a/</a></li></ul> <b>Air Force Research Laboratory: Intern (June 2016 – August 2016)</b> <ul style="list-style-type: none"><li>• Carried out experiments with a deep learning framework called CAFFE to determine the effectiveness of utilizing synthetic data when classifying objects in images</li></ul> <b>NASA Jet Propulsion Laboratory: Intern (June 2015 – August 2015)</b> <ul style="list-style-type: none"><li>• Investigated circumstellar matter in young and dying stars to aid the NASA Origins program in understanding the lifecycle of stars</li><li>• Created an API and pipeline to extract Far and Near ultraviolet (FUV and NUV) properties from Asymptotic Branch (AGB) Stars. I also developed a program to display parameters from extracted AGB stars</li></ul> <b>NASA Ames Research Center: Intelligent Systems Intern (June 2014 – August 2014)</b> <ul style="list-style-type: none"><li>• Assessed a biologically inspired machine-learning algorithm called NuPIC with data from a new federal "Green" building known as "Sustainability Base" at NASA Ames Research Center</li><li>• Employed advanced machine learning algorithms and other statistical methods to detect adverse events in Sustainability Base's data and compared the performance against NuPIC. The algorithms are assessed by their ability to detect anomalies that occur in the future</li></ul>
<b>Languages</b>	C# (Prior Experience), JavaScript (Prior Experience), R (Prior Experience), C++ (Experienced), HTML5(Experienced), Python (Proficient), and SQL (Proficient)
<b>Skills/Tools</b>	Proficient with: Anaconda, Data Visualization, Linux, Machine Learning, jekyllrb, git, Google Suite, Latex, Markdown, Microsoft Office Suite, Unreal Engine 4, and VSCode
<b>Achievements and Awards</b>	UIUC Informatics Terminal Fellowship (2020-2021), UIUC Academic Excellence (2017), Associate GEM Fellowship (2016-Present), Illinois Distinguished Fellowship (2016-2020), Xerox Minority Technical Scholarship (2015-2016), LSAMP Scholar (2013-2015), NASA MUREP Scholarship (2013-2016)
<b>Relevant Publications</b>	[1] Ikegwu, K; Trauger, J; Brunner, R; McMullin, J. PyIF: A Fast and lightweight implementation for computing Transfer Entropy on Big Data (2020). IEEE SoutheastCon 2020 [2] Anand, V; Brunner, R; Ikegwu, K; Sougiannis, T. Predicting Profitability Using Machine Learning (October 8, 2019). Available at SSRN: <a href="https://ssrn.com/abstract=3466478">https://ssrn.com/abstract=3466478</a>

REFERENCES AVAILABLE UPON REQUEST