

John Douglas

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EDUCATION

University of Cambridge <i>Masters of Philosophy Machine Learning & Machine Intelligence</i>	2025-2026
University of Wisconsin-Madison <i>B.S. Statistics, Industrial & Systems Engineering - Distinctive Scholastic Achievement, Deans Honor GPA: 3.85/4.0</i> Courses: Stochastic Modeling, Deep Learning & Generative Models, Multivariate Statistical Analysis*, Mathematical Statistics*, Human Performance & Causation <i>*National University of Singapore</i>	2020-2024

SKILLS

Languages & Libraries: Python, R, SQL, Julia, Java, PyTorch, scikit-learn, pandas, NumPy, L^AT_EX

EMPLOYMENT

Data Science Intern <i>Growers Edge, Des Moines, IA</i>	2024
<ul style="list-style-type: none">Optimized field acreage to minimize frequency of payouts, created a bulk discount to incentivize customers while complying with company Loss Ratio, and made field measurement adjustments for volatility.Utilized Azure Databricks, SQL, DBeaver, DevOps, PyMC, & scikit-learn	
Machine Learning Intern <i>MBZUAI, Abu Dhabi, United Arab Emirates</i>	Summer 2023
<ul style="list-style-type: none">Designed framework for processing long documents using BERT & SVMs in Extreme Multilabel ClassificationDetermined best use of deep learning models given token limits, computational time & available resourcesUtilized PyTorch & scikit-learn for Machine Learning, Computer Vision, & Natural Language Processing applications	
Automated Vehicle Researcher <i>University of Wisconsin-Madison, Cognitive Systems Lab</i>	2022 – Present
<ul style="list-style-type: none">Researching Automated Vehicles and driver interaction by collecting data on simulator, writing technical reports and code scripts, interviewing participants, and presenting findings weeklyCoauthored a paper presented at Human Factors & Ergonomics Society (HFES) 2022	

PROJECTS & PUBLICATIONS

Classification of Long Documents <i>PyTorch, scikit-learn, NumPy, pandas, DataBricks, SQL</i>	Summer 2023
<ul style="list-style-type: none">Utilized deep & linear models to classify 512+ token documents & set new industry benchmarksQueried Databricks SQL for label storage and retrievalCompiled and pre-processed massive datasets	
Sierra Space manufacturing process improvement <i>Python, R, Experimental Design</i>	Jan 2023 – Present
<ul style="list-style-type: none">Determined best measurement program and system pain points to increase yeild from 30% to 75%Won 1st place Ratner Scholarship	
Nudge strategy experience using STM <i>R, Experimental Design, Simulation Design</i>	Aug 2023 – Present
<ul style="list-style-type: none">Made experimental design, interviews, & data analysis with STM package in R for this WIP paper	
Taxonomy of transfers of control for automated vehicles Q <i>Obsidian, Literature Review</i>	Jan – Oct 2022
<ul style="list-style-type: none">Presented research paper at HFES 2022 for Toyota Collaborative Safety Research Center	
Eagle Scout Project <i>Project Management</i>	Aug 2018
<ul style="list-style-type: none">Collaborated with local suppliers and the Ice Age Trail Association to build a low impact demonstration campSourced materials, built structures, and executed multiple project work days	

LEADERSHIP & INVOLVEMENT

Clubs: Statistics & Data Science, IISE, HFES

Academic Tutor <i>University of Wisconsin-Madison, Middle High School</i>	2017 – 2023
<ul style="list-style-type: none">Tutored undergraduate students in Math & Statistics	
Boy Scouts of America <i>Boy Scout Troop 87</i>	2008 – 2019
<ul style="list-style-type: none">Attained Eagle Scout rank, Bronze & Silver Eagle Palms (August 2018)Roles included Junior Assistant Scoutmaster, Senior Patrol Leader. Led meetings and taught camp skills	