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<i>Research Interests</i>	My current research area is in the interdisciplinary fields of Artificial Intelligence and CyberSecurity. Prior interests have included eXplainable Artificial Intelligence (XAI), Graph Machine Learning, and Game Theory.	
<i>Education</i>	<i>Arizona State University</i> Ph.D. in Artificial Intelligence Advisors: Prof. Tiffany Bao	2022-
	<i>University of Virginia</i> M.Sc. in Computer Science (GPA: 3.96/4.00) Advisors: Prof. Madhav Marathe	2019-2021
	<i>Syracuse University</i> M.S. in Data Science (GPA: 4.00/4.00)	2017-2018
	<i>Grand Canyon University</i> B.S. Finance and Economics (GPA: 3.65/4.00)	2012-2015
<i>Research Experience</i>	Research Assistant at <i>Arizona State University</i> <ul style="list-style-type: none">Artificial Intelligence Research	2022-
	Applied Research Intern at <i>Capital One</i> <ul style="list-style-type: none">Explored aspects of organization dynamics under a reinforcement learning setting. Implemented an agent-based modeling system to study managerial incentive structures on experimental program optimization.	2020-2021
	Research Assistant at <i>University of Virginia</i> <ul style="list-style-type: none">Worked in the Biocomplexity Institute and Initiative labs with a focus on graph dynamic systems and cooperative game theory/behavior modeling. Under the supervision of Professor Madhav Marathe.	2019-2020
<i>Publications</i>	Jacob Dineen, Donald Kridel, David Castillo, and Dan Dolk “Unified Explanations in Machine Learning Models: A Perturbation Approach”.	HICSS 2023 (pending)
	Dineen J., Haque A.S.M.AU., Bielskas M. (2021) Formal Methods for an Iterated Volunteer’s Dilemma. In: Thomson R., Hussain M.N., Dancy C., Pyke A. (eds) Social, Cultural, and Behavioral Modeling. SBP-BRiMS 2021.	SBP-BRiMS 2021
	Dineen J., Haque A.S.M.AU., Bielskas M. (2021) Reinforcement Learning for Data Poisoning on Graph Neural Networks. In: Thomson R., Hussain M.N., Dancy C., Pyke A. (eds) Social, Cultural, and Behavioral Modeling. SBP-BRiMS 2021.	SBP-BRiMS 2021

	Dolk, D., Kridel, D., Dineen, J., & Castillo, D. (2020, January). Model Interpretation and Explainability towards Creating Transparency in Prediction Models. In Proceedings of the 53rd Hawaii International Conference on System Sciences.	HICSS 2020
<i>Professional Experience</i>	Data Scientist at <i>Capital One</i> <ul style="list-style-type: none"> ● Productionalized key changes to the core codebase (exposed to 30mm+ active users) from feature engineering/data pipelines, unit tests, custom model architectures, and distributed training/scoring jobs over EC2 instances. Algorithmic changes led to all-time records in recorded PVV. ● *Developed sequential recommendation POCs (LSTM/Transformers) using torch, huggingface, and Nvidia's Merlin ● Co-led/co-created a twice-weekly lecture series on Deep Learning and Neural Recommendation. <p>* work to appear in Nvidia GTC Fall summit (2022)</p>	2021-2022
	Ph.D. Internships at <i>Capital One (2X Data Science, 1X Applied Research)</i> <ul style="list-style-type: none"> ● Researched, implemented, and evaluated neural recommendation solutions under the adtech umbrella. Wrote extensible pipelines in Pyspark, joining unexplored data sources and conducting feature engineering. Provided insight and recommendation on the methodology's utilization in production beyond the scope of my summer project. 	2020-2021
	Analyst and Business Intelligence at <i>Real World Marketing</i> <ul style="list-style-type: none"> ● Responsible for creating automated dashboards, and ad hoc reporting needs. Extracted, compiled, and integrated data sources. Leveraged analytical tools and statistical techniques to interpret data and improve processes. Multivariate analysis paired with A/B testing geared around site conversion points. 	2016-2019
	Data Scientist at <i>Buffalo Check LLC</i> <ul style="list-style-type: none"> ● Cofounded an LLC specialized in delivering advertising solutions to the US military. Drove upwards of 2+ million in revenue as part of a two-person team. ● Directly handled client relationships, business development, ad creation and post campaign reporting. Responsible for all financial data/modeling/forecasting and interpretation. Quantitative analysis on engagement propensity. 	2015-2019
	Optimization Analyst at <i>Voltari</i> <ul style="list-style-type: none"> ● Conducted analysis centered around first and second click ad performance. Worked closely with marketing and engineering to ensure smooth execution and successful achievement of campaign performance objectives. Analysis concerning pricing strategy/optimization. Managed point of interest (POI) database using raw SQL. 	2012-2015

Graduate Courses

Algorithms, Machine Learning, Computer Vision, Formal Methods, Reinforcement Learning, Graph Mining, Learning Theory (Game Theory), Cloud Computing, & Research Hours

UVa

Data Analysis and Decision Making, Business Analytics, Financial Analytics, Marketing Analytics, Advanced Information Systems, Data Science, Data Warehousing, Text Mining, Scripting for Data Analysis, and Information Policy

Syracuse

Technical Skills

Language Python, Java, R, C++, PRISM (Probabilistic symbolic model checker)

Database MySQL, SQLite, NoSQL, MongoDB

Markup LaTeX, HTML

ML Library PyTorch, Keras, Tensorflow, Numpy, Pandas, Dask, NLTK, Networkx, Spark, DeepGraphLibrary, HuggingFace

Other Weka, Mallet, Anaconda Distribution, VSCode, SSIS, SSAS, Git, S3, Databricks, Legoland, Docker

Activities

Student Ambassador Syracuse University, School of Information Studies (2018)

Math Tutor Calculus and Linear Algebra. Chandler Gilbert Community College, Spring 2019

Independent Contracting Scripting and Automation (2018-2020)

Research Reviewer HICSS 2021, HICSS 2022, SBP-BRiMS 2021