# Bryon Kucharski

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#### Education

Master of Science in Computer Science, University of Massachusetts Amherst, Exp. May 2020 GPA: 3.78/4.00 Bachelor of Science in Computer Engineering, Wentworth Institute of Technology, 2018 GPA: 3.84/4.00

#### Professional Experience

Intern, Human-Autonomy Interaction Laboratory, Sonalysts, Waterford, CT

Summer 2019

- Researched machine learning and ensemble methods for authorship attribution for use in DoD contracts
- Formulated the pipeline and collected/cleaned datasets for time series forecasting of satellite signal strength based on terrestrial and space weather

Test Development Engineering Co-op, Teradyne, North Reading, MA 2017 Full Time, 2018 Part Time

- Enhanced a statistical process control (SPC) tool by reducing the time to create plots (Part Time)
- Developed a C# and C++ API and a GUI for controlling and a Universal Robots robotic arm (Full Time)

Research Assistant Co-op, Wentworth Institute of Technology, Boston, MA

Supervisors: Dr. Aaron Carpenter, Dr. Mehmet Ergezer

- Contributed to three research projects which resulted in three papers accepted to ASEE National Conference and one poster accepted to SIGCSE

Electrical Engineering Intern, Gerber Technology, Tolland, CT

- Renovated an existing circuit board test fixture by reconstructing cable sets and enhancing test software
- Implemented two Google Apps Script ticketing systems to manage deviations in the manufacturing process

## Skills

Languages Python, C#, C++, Java, ARM Instruction Set, Verilog

Tools PyTorch, Keras, numpy, pandas, scikit, Unix/Linux, Microsoft Visual Studio, Unity

#### **Publications**

2019	Multi-resolution Attention with Signal Splitting for Multivariate Time Series Classification. Bryon
	Kucharski, Rheeya Uppaal, Bhanu Singh, Iman Deznabi and Madalina Fiterau. ICML Time Series
	Workshop.
2019	Multi-resolution Networks For Flexible Irregular Time Series Modeling. Bhanu Singh, Iman Deznabi,
	Bharath Narasimhan, <b>Bryon Kucharski</b> , Rheeya Uppaal, Akhila Josyula, and Madalina Fiterau. arXiv
	preprint.
2019	Machine Learning Based Heuristic Search Algorithms to Solve Birds of a Feather Card Game. Bryon
	Kucharski, Azad Deihim, and Mehmet Ergezer. EAAI19.
2018	Real-World Projectile Catching with Reinforcement Learning: Empirical Analysis using Discretized Sim-
	ulations. Bryon Kucharski, Adam Ziel, Michael Hickey, and Collin Travers. MIT URTC.
2018	Designing laboratory work for a novel embedded AI course. Bryon Kucharski, Aaron Carpenter, and
	Mehmet Ergezer. ASEE National Conference.
2018	Is a Virtual Reality Based Laboratory Experience a Viable Alternative to the Real Thing? Mohammed
	Almaghrabi, Bryon Kucharski, and James McCusker. ASEE National Conference.
2018	The Undergraduate Perspective: How to Survive an Undergraduate Engineering Program. Bryon
	Kucharski, Aaron Carpenter, Mehmet Ergezer, and Joan Giblin. ASEE National Conference.
2018	Integration of Universal Robot into Performance Verification (PV) Test Process. Jianrong Chen, Everett
	Parhiala, Mike Herzog, and Bryon Kucharski. Teradyne User Group (TUG) Conference.

## **Awards and Activities**

2018	President's Award for Computer Engineering
2014-2018	Senior Captain, Wentworth Institute of Technology Baseball
2014-2018	Dean's List
2016-2018	Spring Academic All-Commonwealth Coast Conference