

Jack Kenney

College of Information and Computer Sciences,
University of Massachusetts at Amherst

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Phone: 508-971-8461
jkenney@umass.edu
www.jack-kenney.com

Researcher and Developer
Machine Learning

Titles and Distinctions

- **Machine Learning Consultant**, Lam Research Corporation (since 2018).
- **Neural Network Researcher**, Biologically Inspired Neural and Dynamical Systems Laboratory, College of Information and Computer Science, University of Massachusetts at Amherst (since 2017).
- **Mobile Application Developer**, UMass Disability Services, Amherst, MA (since 2017).
- **Software Development Intern**, Optum, Inc., Boston, MA, (2017).
- **Software Development Intern**, iMedia Solutions, LLC., Dartmouth, MA (2014-2015).

Academic Studies and Diplomas

2015–2019	B.Sc. in computer science , <i>with Honors</i> , GPA 3.91/4.00, Commonwealth Honors College, College of Information and Computer Sciences, University of Massachusetts at Amherst.
2011–2015	High school , <i>4th in class with Distinction</i> , GPA 3.99/4.33, Dartmouth High School

Research Areas

- Neural network optimization algorithms
 - Non-convex loss functions
 - Epi-genetic evolutionary optimization
- Process results prediction from time-series data
 - Domain knowledge-based summarization techniques: functional fits, statistical analysis
 - Data expansion techniques: distribution calculation and sampling, noise introduction
- Recurrent neural network architectures
 - Reservoir computers and echo state networks

Public Projects

- Bamboo – github.com/jackkenney/bamboo
 - A library of functions to manipulate pandas dataframes in python.
- Reservoir Computer – github.com/jackkenney/reservoir-computer
 - An implementation of an echo state network reservoir computer to synthesize sine waves given frequency and duration.