Michael Briden

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� https://github.com/bridenmj

Education

2018 – …	🔖 **PhD Student, UC Santa Cruz, Santa Cruz, CA**
	Emphasis in Machine Learning and Data Science.
2012 – 2015	🔖 **B.Sc. Mathematics, Pacific Lutheran University, Tacoma, WA**
	Emphasis in Pure Mathematics with C.S. minor.
2010 – 2015	🔖 **AS, Pierce College, Lakewood, WA**
	Emphasis in Mathematics.

Teaching Assistant Relevant Experience

🔖 **Applied Machine Learning, UC Santa Cruz**
An introduction to common machine learning methods including deep learning, linear regression, and clustering. Topics covered included feedforward/recurrent architectures, convolution, linear regression models, optimization, risk minimization, and probability.

🔖 **Artificial Intelligence, UC Santa Cruz**
Provide review of topics in deep learning, search algorithms, constraint satisfaction algorithms, and simple Markov decision processes.

🔖 **Beginning Programming in Python, UC Santa Cruz**
Introduction to programming topics such as primitive types, branching, functions, looping, and recursion in addition to Python language specifics.

🔖 **COSMOS Summer 2019-ML and NLP Cluster, UC Santa Cruz**
H.S. senior-level summer program geared towards machine learning with topics including artificial neural networks, neural network components, and basic clustering techniques.

🔖 **Data Structures, UC Santa Cruz**
A second course in computer Science covering topics such as Sorting, LinkedLists, Queues, Trees, and Recursion.

Miscellaneous Experience

Projects

2021	🔖 **WaveFusion Squeeze-and-Excitation: Towards an Accurate andExplainable Deep Learning Framework in Neuroscience** Exploration of fusion methods for deep learning models for identifying and localizing neurological phenomena.
2020	🔖 **Regression Theory for Categorical Time Series with Python** Reproduced results from Kedem using Python statmodels along with Python data preprocessing pipeline.
2019	🔖 **Classification of Electroencephalogram Data using SpectroImaging** Classify mental states using spectrograms of EEG data and deep neural networks.

Relevant Courses

🔖 **Machine Learning**

🔖 **Artificial Intelligence**

🔖 **Information Theory**

🔖 **Introduction to Classical Statistical Learning**

🔖 **Applied Bayesian Statistics**