

# Course Information

This course will provide you a foundational understanding of machine learning models (logistic regression, multilayer perceptrons, convolutional neural networks, natural language processing, etc.) as well as demonstrate how these models can solve complex problems in a variety of industries, from medical diagnostics to image recognition to text prediction. In addition, we have designed practice exercises that will give you hands-on experience implementing these data science models on data sets. These practice exercises will teach you how to implement machine learning algorithms with PyTorch, open source libraries used by leading tech companies in the machine learning field (e.g., Google, NVIDIA, CocaCola, eBay, Snapchat, Uber and many more).

This course is taught by the following instructors:

## Larry Carin

Larry was the James L. Meriam Distinguished Professor of Electrical and Computer Engineering at Duke University. However, he is currently Provost at KAUST, the King Abdullah University of Science and Technology in Saudi Arabia.

## David Carlson

David is the Assistant Professor of Civil and Environmental Engineering at Duke University. He is also an Assistant Professor in Biostatistics and Bioinformatics, Assistant Professor in the Department of Electrical and Computer Engineering, and Assistant Professor of Computer Science.

## Timothy Dunn

Timothy is an Assistant Professor in Neurosurgery at Duke University. His current research interests are in machine learning, convolutional neural networks, neurobiology, animal behavior, computer vision, prognostic modeling, traumatic brain injury and global health.

## Kevin Liang

Kevin was a PHD candidate at Duke University researching deep learning, with interests in computer vision, natural language processing, continual learning, and generative models. He is currently a Research Scientist at Facebook AI.

All of these instructors have a vast background and knowledge of Machine Learning, and we hope you enjoy the videos created for this course. **For your convenience, there is a PDF of all the slides that are presented in each video. The link to access the PDF is under "Resources" on the top right of each video.**