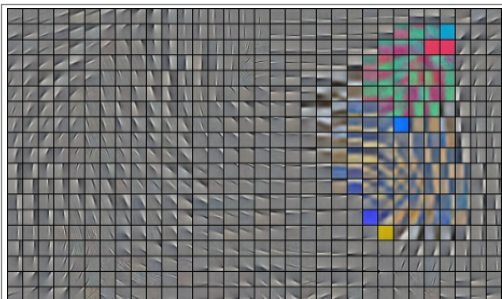


DECEMBER 19, 2012

# Statement of Accomplishment

## HOO-CHANG SHIN

HAS SUCCESSFULLY COMPLETED UNIVERSITY OF TORONTO'S NON-CREDIT ONLINE OFFERING OF



### Neural Networks for Machine Learning

The course covered learning techniques for many different types of neural network including deep feed-forward networks, recurrent networks and Boltzmann Machines. It covered recent applications to speech, vision, and language, and used hands-on programming assignments.



GEOFFREY E. HINTON  
DEPARTMENT OF COMPUTER SCIENCE  
UNIVERSITY OF TORONTO

PLEASE NOTE: THE ONLINE OFFERING OF THIS CLASS DOES NOT REFLECT THE ENTIRE CURRICULUM OFFERED TO STUDENTS ENROLLED AT THE UNIVERSITY OF TORONTO. THIS STATEMENT DOES NOT AFFIRM THAT THIS STUDENT WAS ENROLLED AS A STUDENT AT THE UNIVERSITY OF TORONTO IN ANY WAY. IT DOES NOT CONFER A UNIVERSITY OF TORONTO GRADE; IT DOES NOT CONFER UNIVERSITY OF TORONTO CREDIT; IT DOES NOT CONFER A UNIVERSITY OF TORONTO DEGREE; AND IT DOES NOT VERIFY THE IDENTITY OF THE STUDENT.