Computer Science Capstone Experience Approval

You must print this out and obtain the approval of three full-time computer science faculty members.

Date: February 04, 2016

Name: Nicolas Tolmais   **Banner ID:** 000673112

Cumulative Hours: 131   **Expected Graduation Date:** May 2016

Capstone Type: Personal Software Project

Experience Supervisor: Alan Garvey

Experience Title: Neural Network for Stock Market

Capstone Experience Description:

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For my capstone I will be creating an artificial neural
network to look into patterns of stock market. Its focus will
be on the stocks of the NASDAQ. The input will be data on
the stock: the open, low, high, close, and volume values on
a particular day. It will also be a 1,7, and 30-day movement
of the stock and the key market value from the NASDAQ.
Output will be closing value of next day. The data I will be
using is from
http://www.nasdaq.com/symbol/aapl/historical where aapl
can be interchanged with other stocks. This contains full
data sets of organized stock data. It also includes daily
updates for new data that I will be using. It will be written in
python 3.4. The library I will use to build and train it is
Pybrain, a machine learning library.
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Planned Demonstration of Capstone Experience Completion:

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Show the results of the neural network and how closely
related it is to real life stock movements. Prediction of
future stock during research
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CS faculty approval signatures:

Supervisor: _____ Date: _____

Professor1: _____ Date: _____

Professor2: _____ Date: _____

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