# ECE 531: Project Registration Form

Deadline for sending this form to the instructor:

## March 14, 2017

Name:  Paulito Mendoza

UIN:   677164577

Project title/abstract:  "Identifying Handwritten Digits via Bayes Classifier"

Character recognition is a common operation in modern administrative operations such as document scanning and conversion and check deposits in banking transactions. This project will illustrate a Bayes classifier trained on the well-known MNIST digit database to identify handwritten digits.

**Stretch goal 1:** *for entertainment purposes, illustrate one application of this character recognition approach by feeding a handwritten (scanned) Sudoku puzzle to a software Sudoku solver, to solve the puzzle*

**Stretch goal 2:** *does the classifier work well with electronic fonts? Try feeding Sudoku puzzle images grabbed from the Internet to the Sudoku puzzle solver, see how well it works.*

*NOTE: these stretch goals based on a Sudoku solving algorithm I wrote some years ago. It's missing the image parsing and character recognition to automate input. This project is an opportunity to continue augmenting this toy with new features.*

I can present my ECE 531 project on*

(Students are encouraged to pick several dates to provide more flexibility in scheduling)

4/13          ( )          In order of preference,
                           1=highest:

4/18          ( 1 )

4/25          ( 2 )

4/27          ( 3 )

_____

* Capacity per day: 3