

# Senior Design

## Milestones, Timeline, and Effort Matrix

Evan Hoyle

# Timeline:

1. A developer can identify a playing card using computer vision
  - a. Find or create vision model
  - b. Do basic test visualizing a single card
2. A developer can identify multiple playing cards using computer vision
  - a. Expand basic playing card identification by seeing two cards for a single player
  - b. Expand multiple card viewership by dividing vision into two players
3. A developer can identify playing cards importance to a poker game using computer vision
  - a. Expand multiple card viewership by dividing flop,turn,river and multiple players
  - b. Calculate the winner based on river
4. A developer can use computer vision in real time
  - a. Expand model from a screenshot to multiple frames
5. A developer can create a user interface showing basic poker information
  - a. Create a user interface showing poker information
6. A developer can create a simulated poker game to test user interface
  - a. Create a text based simulated poker game to test user interface
7. A developer can link user interface to computer vision
  - a. Port the computer vision to the same text stream format to be used for user interface
8. A user can see winner of a hand in poker on user interface
  - a. Live demo of beta system
9. A user can see whose turn it is on GUI
  - a. Add functionality to see who has bet
  - b. Add functionality to determine dealer
  - c. Calculate players turn
  - d. Display turn on GUI
10. A user can use GUI for a full hand
  - a. Live demo with turn tracking
11. A user can use Application for 3 hands
  - a. Create functionality to rest when the hand has ended
  - b. Live demo of 3 hands
12. A developer can detect multiple players
  - a. Create functionality for a cash game
    - i. Players can leave or join between hands
13. A developer can detect when a player is no longer playing
  - a. Detect a player is no longer being delt cards
  - b. Detect when a play has no chips
14. A user can use Application for an entire game of poker
  - a. Full system test
  - b. Live demo

[illegible]

## Effort Matrix:

As a sole project I will complete all of the work for all tasks.