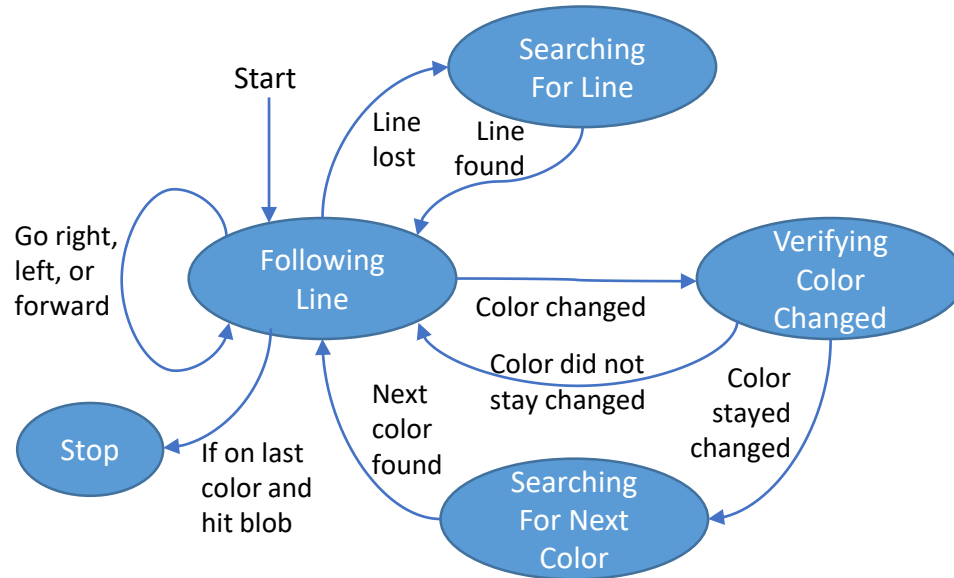


# Color Line Following State Machine



- **Following Line** – sense color and photoresistors and go right or left if drifting off line, else go forward. If color is wrong, not white, and we're not on the last color, change to **Verifying Color Changed**. If color is white then if last direction was right or left, go that way, otherwise increment lost count. If lost count > n, change to **Searching For Line**. If on last color and hit blob, change to **Stop**.
- **Verifying Color Changed** – if color stays changed after m iterations, randomly choose right or left to search, increment color index, and change to **Searching For Next Color**, otherwise change back to **Following Line**.
- **Searching For Next Color** – if color is not next color, keep turning in search direction. If next color detected, set acceleration and change to **Following Line**.
- **Searching For Line** – if color is not correct, then sweep right for x ms (time to approximate 90 deg) then repeat sweeping left 2x ms and right 2x ms, else if correct color, then set acceleration and change back to **Following Line**.