Alaa'd Biweekly Update Oct 12th

- Created a weighted event level efficiency instead of throwing away events

$$P(2\ or\ more\ \mu\ passing) = 1 - \left[\prod_{i=1}^{n}(1-e_i) + \sum_{i=1}^{n}\left(e_i \times \prod_{j\neq i}(1-e_j)\right)\right]$$

```python
def weight(e_list):
    # Calculate the first term: Product of (1 - e_i) for i=1 to n
    first_term = reduce(mul, [(1 - e) for e in e_list], 1)

    # Calculate the second term: Summation for i=1 to n of (e_i * Product of (1 - e_j) for j!=i)
    second_term = 0
    n = len(e_list)
    for i in range(n):
        e_i = e_list[i]
        remaining_elements = e_list[:i] + e_list[i+1:]
        prod_remaining = reduce(mul, [(1 - e) for e in remaining_elements], 1)
        second_term += e_i * prod_remaining

    # Combine both terms and subtract from 1
    result = 1 - (first_term + second_term)

    return result
```

In the process of applying it to the events to test it against the previous

- Created a quick start guide in the GitHub repo to generate events using our framework