Progress Report

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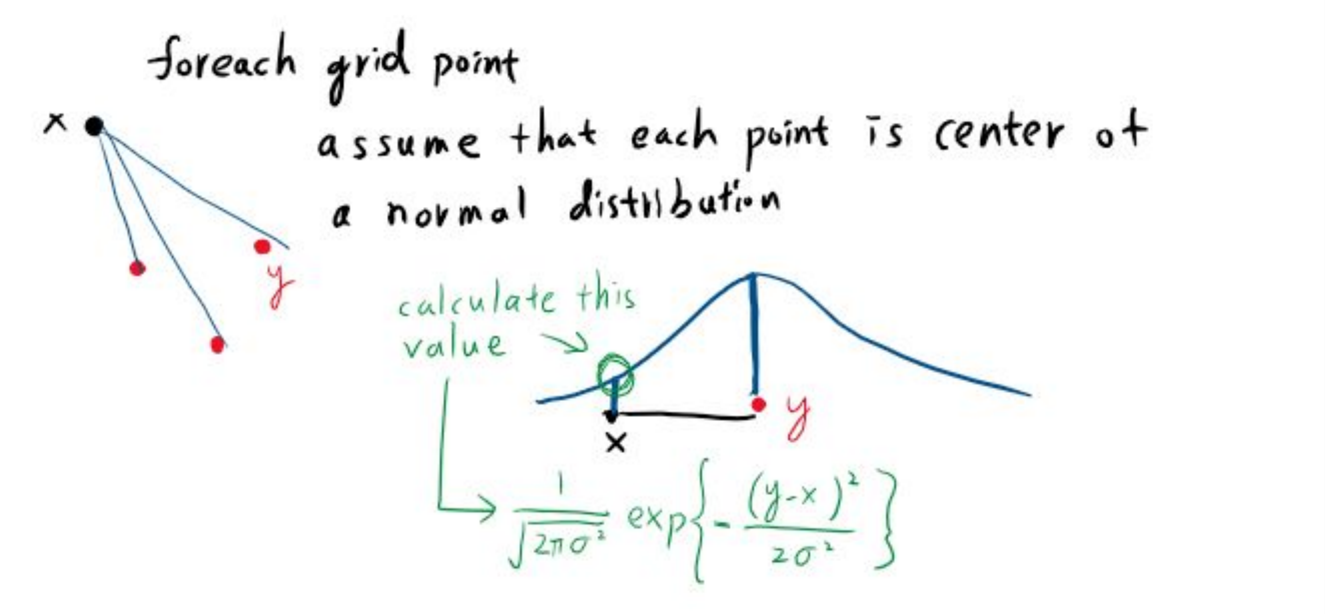
Rewrite the function



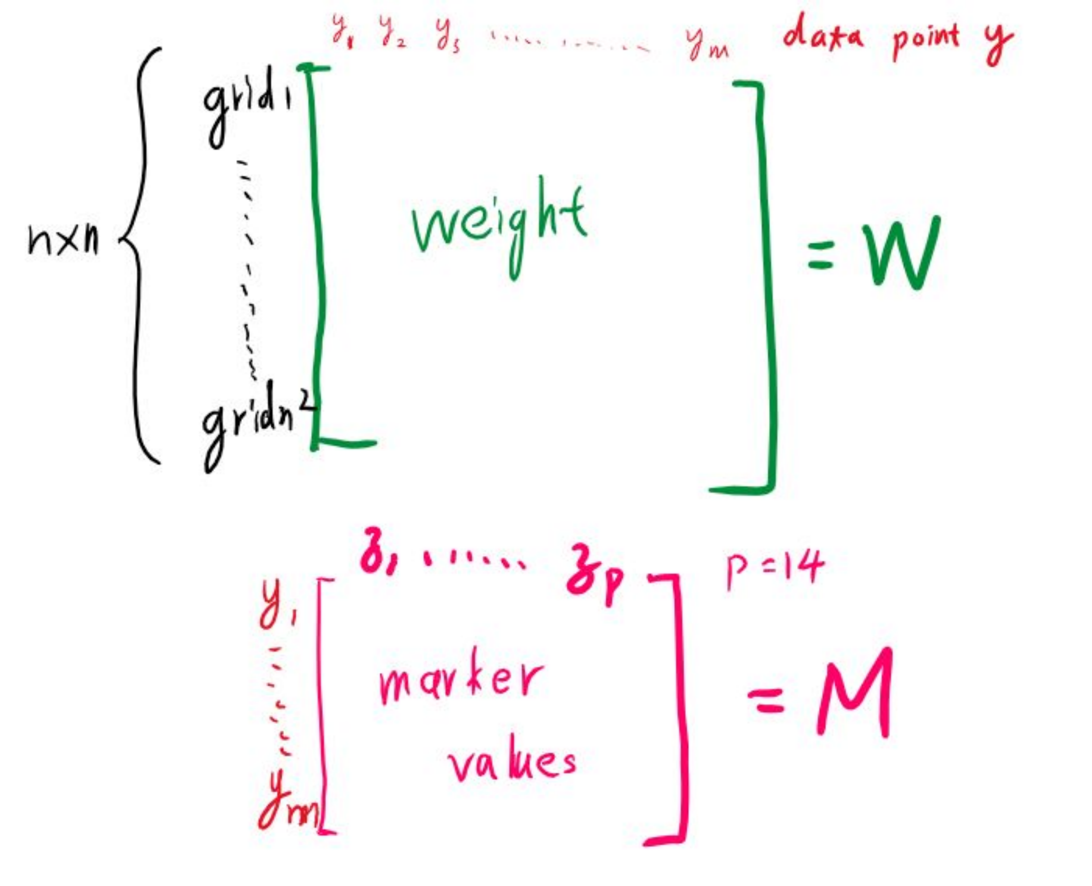
foreach grid point

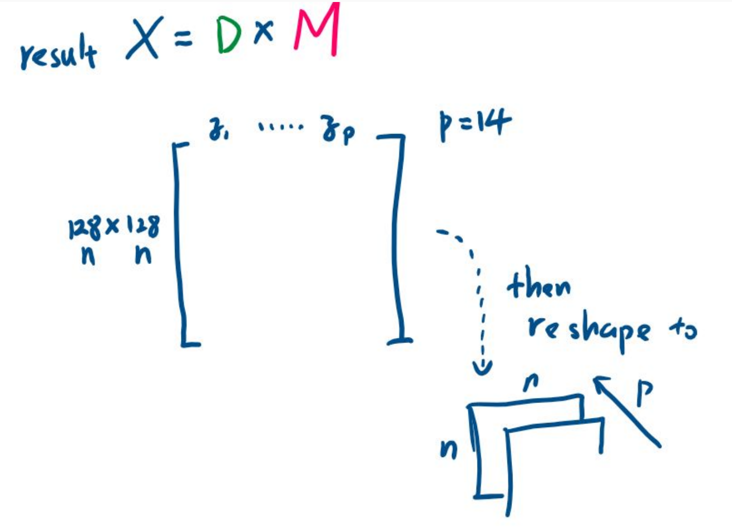
assume that each point is center of a normal distribution

calculate this value

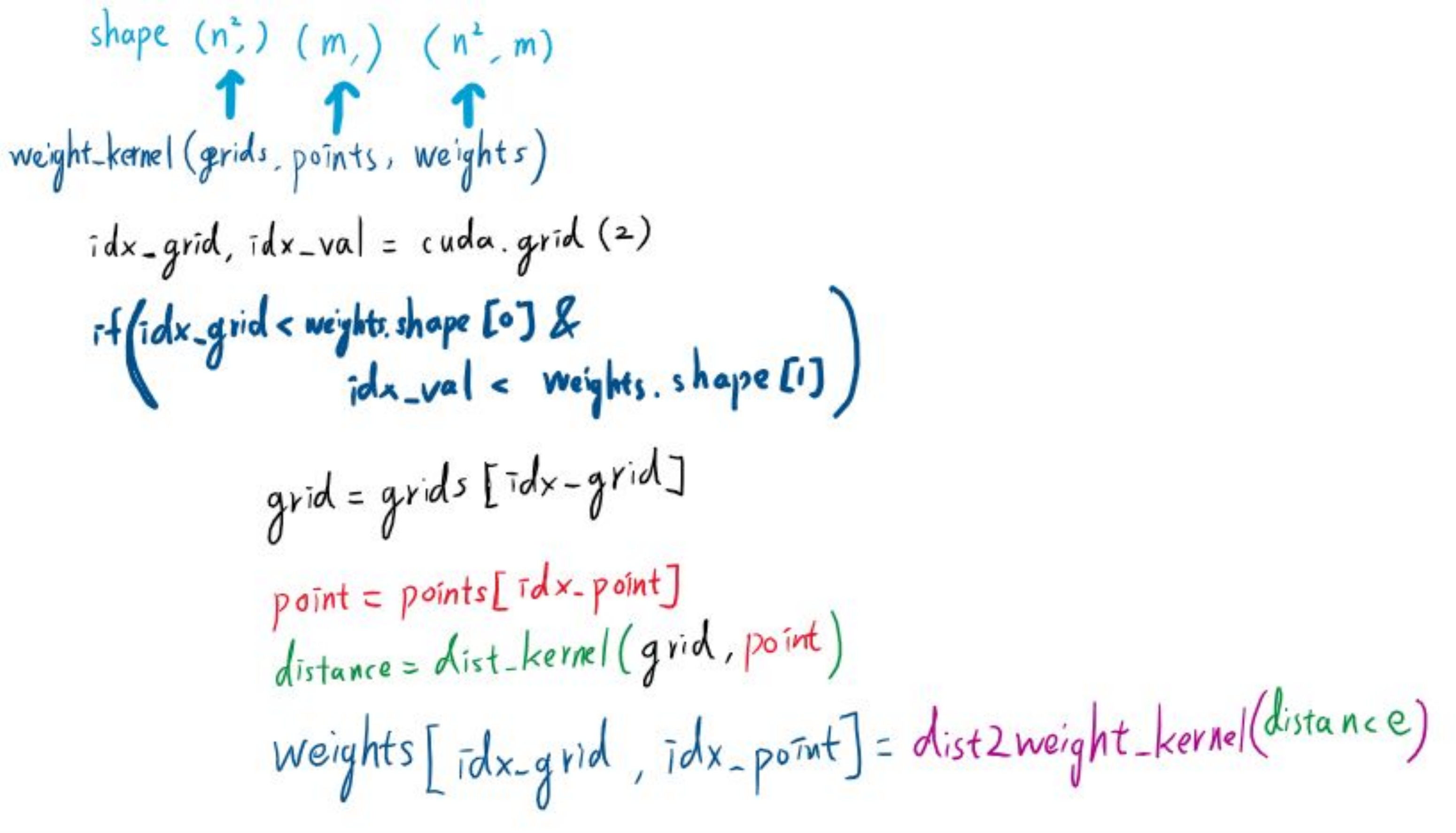
$$\frac{1}{\sqrt{2\pi\sigma^2}}\exp\left\{-\frac{(y-x)^2}{2\sigma^2}\right\}$$

Rewrite the function





Rewrite the function

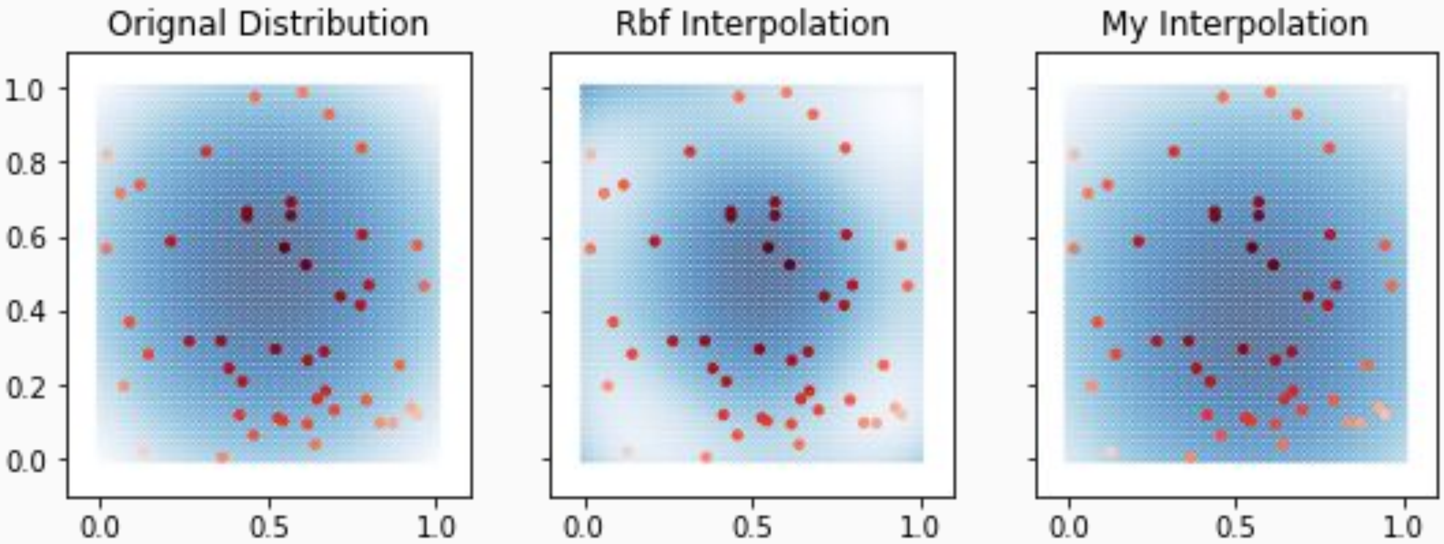


shape $(n^2,)$ $(m,)$ (n^2, m)

↑ ↑ ↑

```
weight_kernel(grids, points, weights)

    idx_grid, idx_val = cuda.grid(2)
    if(idx_grid < weights.shape[0] &
                    idx_val < weights.shape[1])

            grid = grids[idx-grid]

            point = points[idx_point]
            distance = dist_kernel(grid, point)

            weights[idx_grid, idx_point] = dist2weight_kernel(distance)
```

Quick Results



Next Step

- Benchmarking the performance of functions
- Try to apply the function on EQAPOL data