

Optimization

```
graph LR; A[Optimization] --- B[Machine Learning]; A --- C[Pattern Recognition]; A --- D[Optimal Control]; A --- E[Path Planning];
```

The diagram is a hierarchical tree structure. On the left, a green rectangular box contains the word 'Optimization'. A horizontal line extends from the right side of this box to a vertical line. From this vertical line, four horizontal lines branch out to the right, each connecting to a light green rectangular box. These boxes contain the text 'Machine Learning', 'Pattern Recognition', 'Optimal Control', and 'Path Planning' from top to bottom. There are also some faint, overlapping colored rectangles (pink, light blue, and light green) behind the main 'Optimization' box.

Machine Learning

Pattern Recognition

Optimal Control

Path Planning