Learning to Detect Proximity to a Gas Source with a Mobile Robot

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- Gas source declaration using gas sensors only
- 1056 declaration trials with varying distance to the gas source
- SVM’s were used for classification
- Considerably better results than using an optimal threshold value
- The course of the classification rate indicates that different properties of the concentration field were learned to declare proximity to the source

The gas-sensitive mobile robot in front of an object suspected to be a source of gaseous Whiskey.