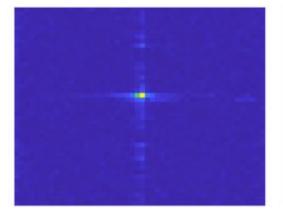
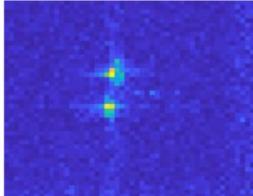
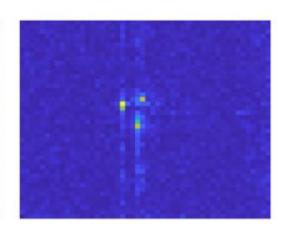
# Classification of room occupancy

Kristyna Pijackova





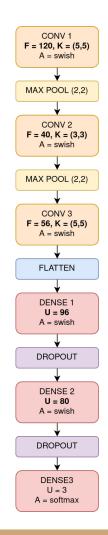


## Data Pre-processing

- Data cleaning check for invalid values, replace it
- Dataset creation store the corrected data in .npy
- Data normalization get the max value from training set and divide the datasets
- Labels encoding
- Data splitting 80:20% ratio for training and validation sets

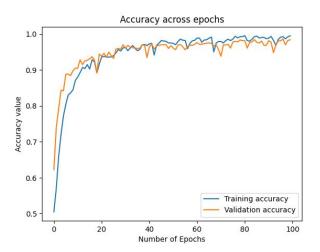
# Model Training

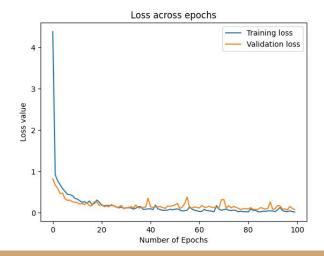
- Bayes Optimization for better results
- Convolutional Neural Network
  - 3 convolutional layers
  - 2 max pooling layers
  - 3 dense layers
  - Adam optimizer
  - o 100 epochs



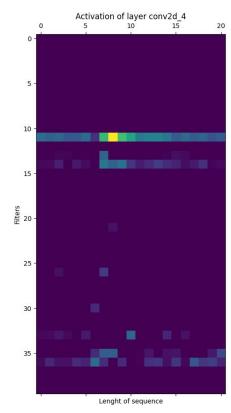
#### Model Evaluation

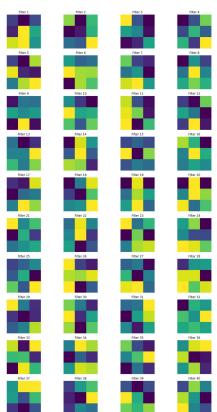
- 98.369 % on validation set
- 98.309 % on test set

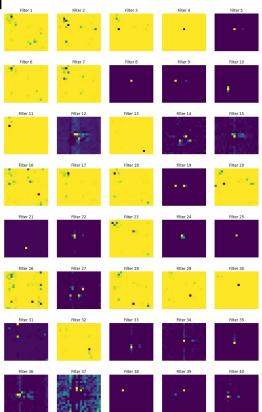




### Activations, Filters and Feature Maps...







# Thank you for your attention!