



# Project: Smart Building HHS

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- Hyperparameter Tuning
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- Planning voor afronding
- \*Belangrijke mededeling!\*



# Hyperparameter tuning

- 3 Fold Cross Validation
- [2,3,4,5] hidden layers
- [25,50,75,100] neuronen per layer
- 48x model doorrekenen

# Hyperparameter tuning

```
Best: -0.222263 using {'layers': 2, 'neurons': 100}
-0.268249 (0.083721) with: {'layers': 2, 'neurons': 25}
-0.247574 (0.055026) with: {'layers': 2, 'neurons': 50}
-0.231306 (0.048064) with: {'layers': 2, 'neurons': 75}
-0.222263 (0.049012) with: {'layers': 2, 'neurons': 100}
-0.358702 (0.070268) with: {'layers': 3, 'neurons': 25}
-0.320324 (0.069840) with: {'layers': 3, 'neurons': 50}
-0.284533 (0.085593) with: {'layers': 3, 'neurons': 75}
-0.271397 (0.068535) with: {'layers': 3, 'neurons': 100}
-0.432739 (0.105713) with: {'layers': 4, 'neurons': 25}
-0.400545 (0.095197) with: {'layers': 4, 'neurons': 50}
-0.399401 (0.082147) with: {'layers': 4, 'neurons': 75}
-0.353055 (0.073392) with: {'layers': 4, 'neurons': 100}
-0.495536 (0.069718) with: {'layers': 5, 'neurons': 25}
-0.437225 (0.053129) with: {'layers': 5, 'neurons': 50}
-0.408919 (0.061162) with: {'layers': 5, 'neurons': 75}
-0.408926 (0.082563) with: {'layers': 5, 'neurons': 100}
```



# Hyperparameter tuning

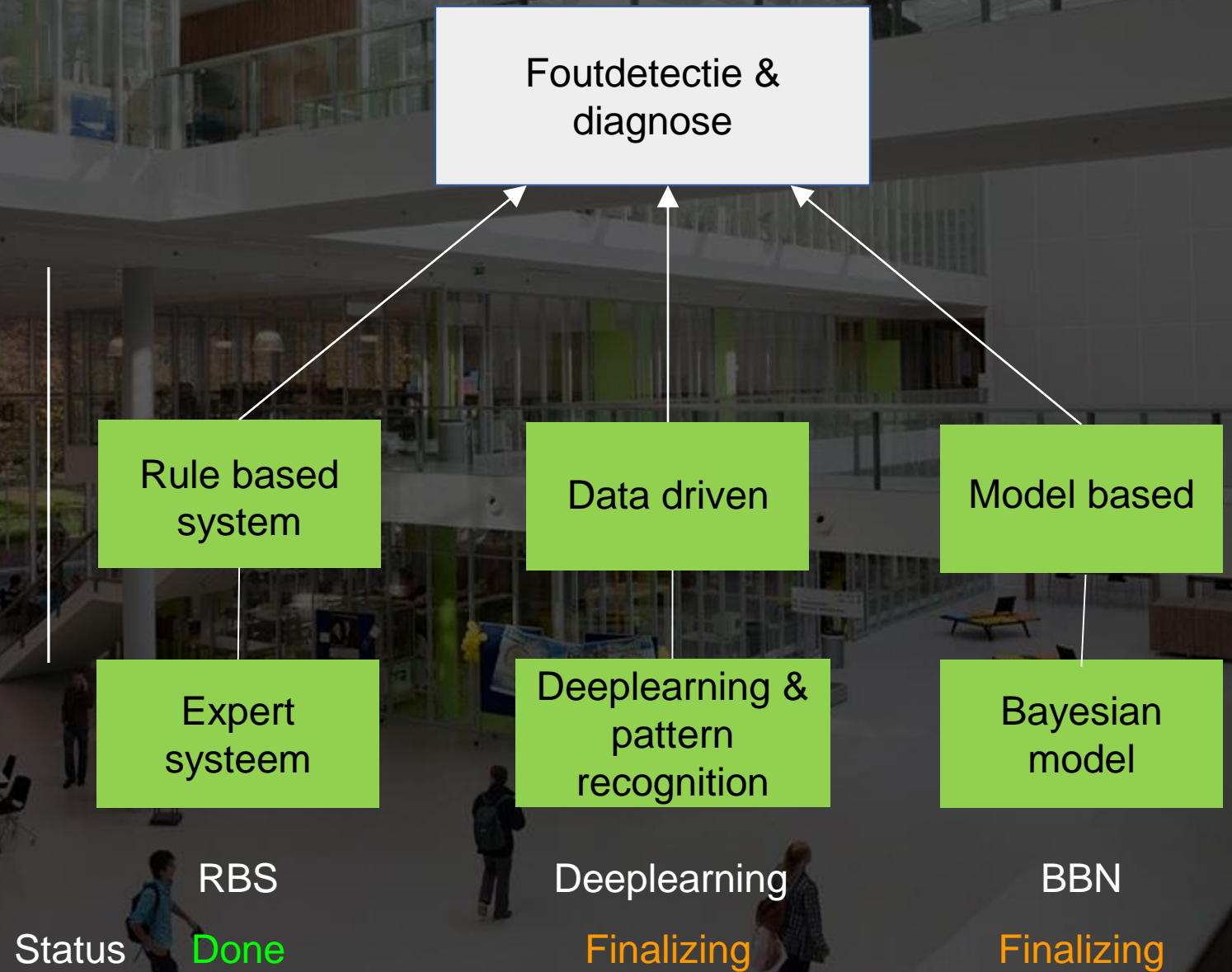
- 3 Fold Cross Validation
- [2] hidden layers
- [300,400,500,600,700,800,900] neuronen per layer
- 21x model doorrekenen



# Hyperparameter Tuning

```
Best: -0.246250 using {'neurons': 800}  
-0.281921 (0.101114) with: {'neurons': 300}  
-0.290716 (0.077194) with: {'neurons': 400}  
-0.271131 (0.081607) with: {'neurons': 500}  
-0.261944 (0.048546) with: {'neurons': 600}  
-0.262627 (0.067197) with: {'neurons': 700}  
-0.246250 (0.069088) with: {'neurons': 800}  
-0.253706 (0.075917) with: {'neurons': 900}
```

# Task groups



A photograph of a modern, multi-level interior space, likely a school or university atrium. The space features glass railings, blue accents on the walls and railings, and a high ceiling with exposed structural elements and pendant lights. People are visible on different levels, and there are some colorful steps in the foreground.

# Onderzoeks- rapport

- Opdracht context beschreven
- Aanleiding/probleemstelling
- Structuur opgezet



# Planning

- Afronden werkzaamheden
- Onderzoeksrapport afmaken
- Paper schrijven

# Applied Data Science goes Chinese!

Wanneer: Vr. 02-02-2018

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Opgeven bij: Gudjon of Laura

Kosten: € 26,50 3 uur lang

**!Vooraf betalen!**







Vragen?