

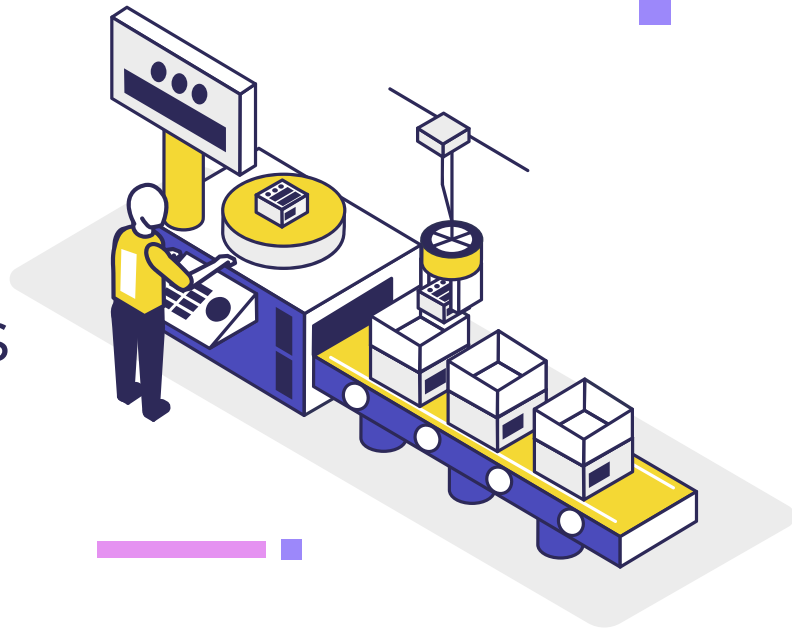
# On The Surface

## Troubles in Dermatology Diagnosis

### Track 3

**HACKGURLS**

Margaret, Paige and Polina



# Introduction

**Problem**

How to quickly diagnose skin conditions in a variety of settings.

**Scope**

Only clinical data used to provide on the spot results from on the spot observations.

**Impact**

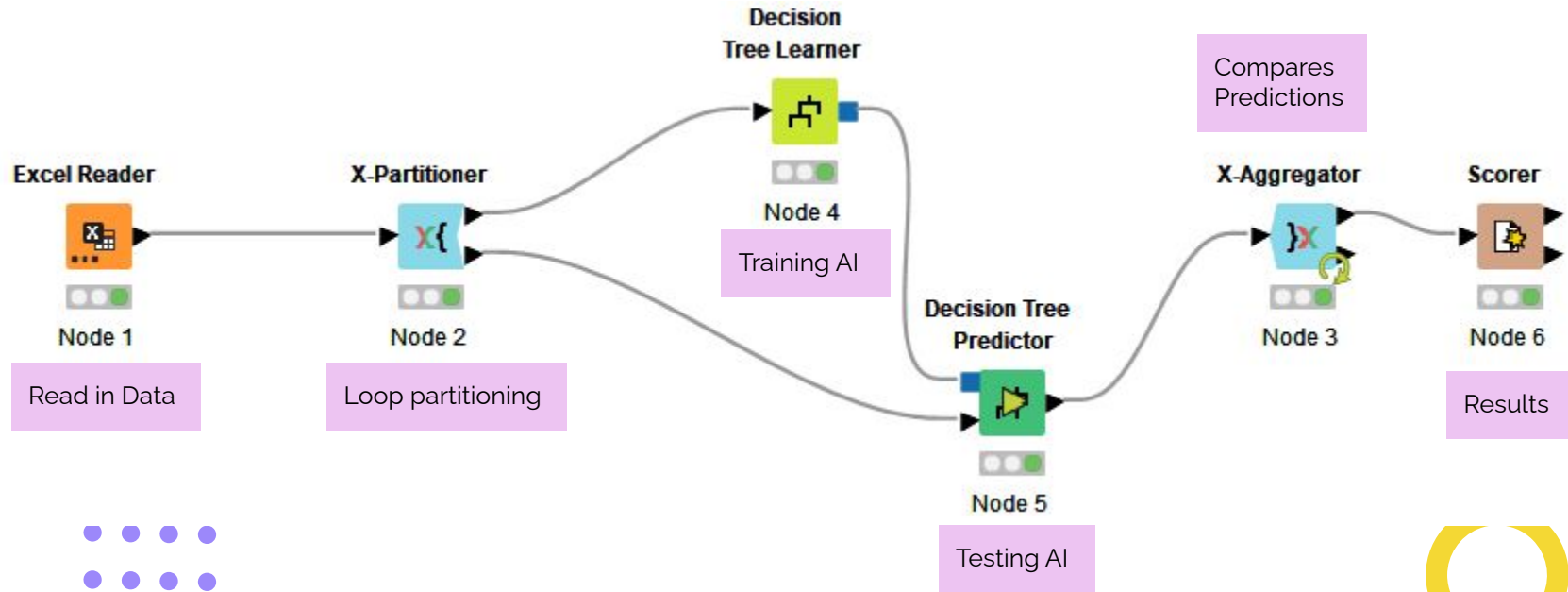
AI software that facilitates quick, easy, and accessible diagnosis.

**Personal**

Aids in limiting misdiagnosis and uncertainty "which I have personally experienced with one of these conditions"



# MODEL



# Model Analysis

Confusion Matrix

Row ID	seboeic dermatitis	psoriasis	lichen planus	cronic dermatitis	pityriasis rosea	pityriasis rubra pilaris
seboeic dermatitis	47	4	0	6	4	0
psoriasis	9	98	0	1	3	1
lichen planus	0	0	69	1	2	0
cronic dermatitis	11	0	1	38	1	1
pityriasis rosea	6	2	0	3	38	0
pityriasis rubra pilaris	2	1	0	3	0	14



**0.788**

Cohen's Kappa



**83.1 %**

Model Accuracy



# Citations

## GITHUB Link:

- <https://github.com/paigemcfar/Hackathon>

## Data Set:

- Itler, N. and Altay Guvenir, H., 2022. *UCI Machine Learning Repository: Dermatology Data Set*. [online] Archive.ics.uci.edu. Available at: <<https://archive.ics.uci.edu/ml/datasets/Dermatology>> [Accessed 9 January 2022].

## Images:

- <https://www.canva.com/>

## Resources:

- KNIME Hub. 2022. *Training a Decision Tree – kathrin*. [online] Available at: <[https://hub.knime.com/knime/spaces/Examples/latest/04\\_Analytics/04\\_Classification\\_and\\_Predictive\\_Modelling/07\\_Decision\\_Tree~wjBRbBRnly6fu4gw](https://hub.knime.com/knime/spaces/Examples/latest/04_Analytics/04_Classification_and_Predictive_Modelling/07_Decision_Tree~wjBRbBRnly6fu4gw)> [Accessed 9 January 2022].