

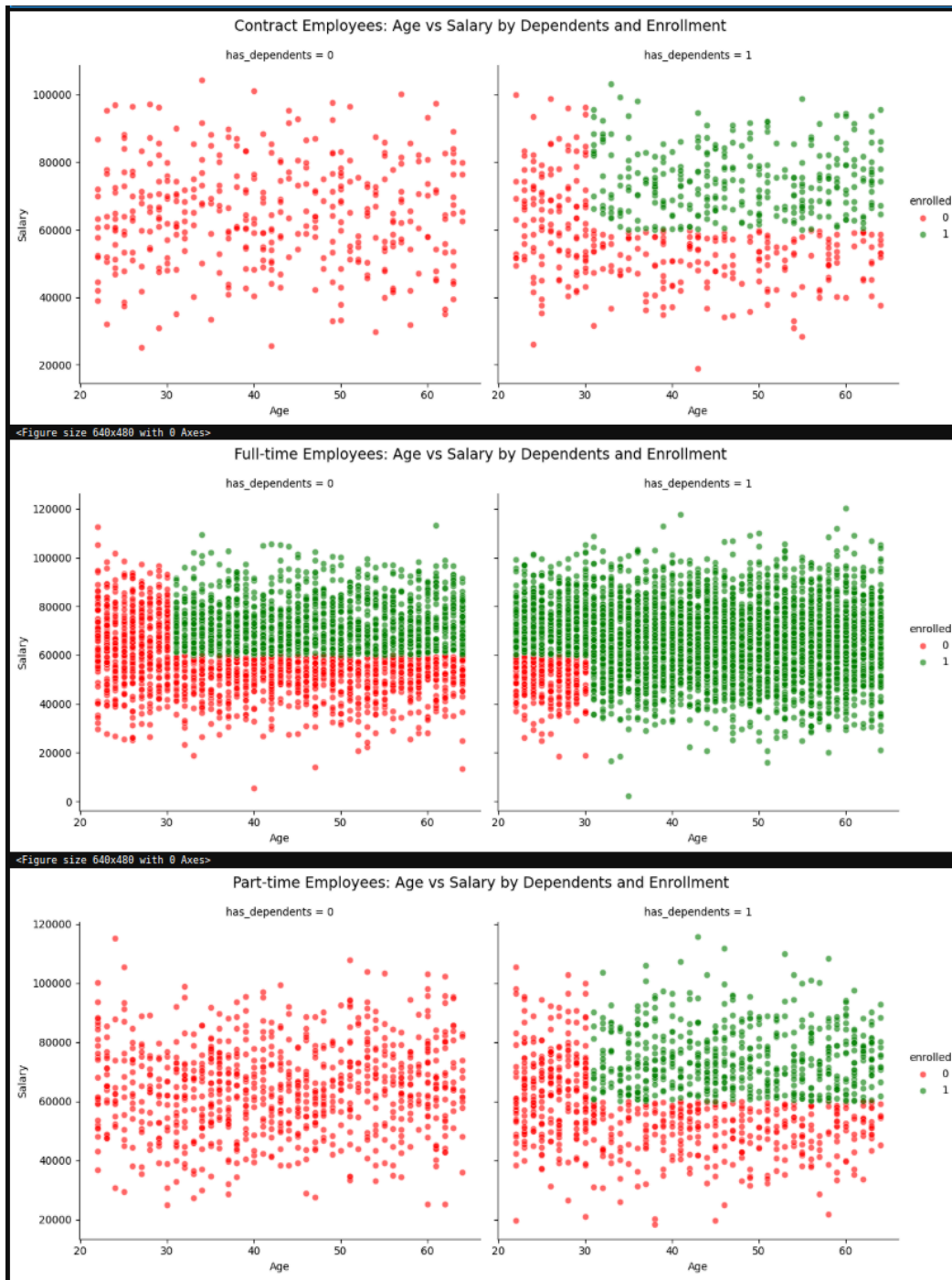
Data Observations:

Basic Sanity Checks:

- Target Data Looks fairly distributed.
- Clearly No missing values.

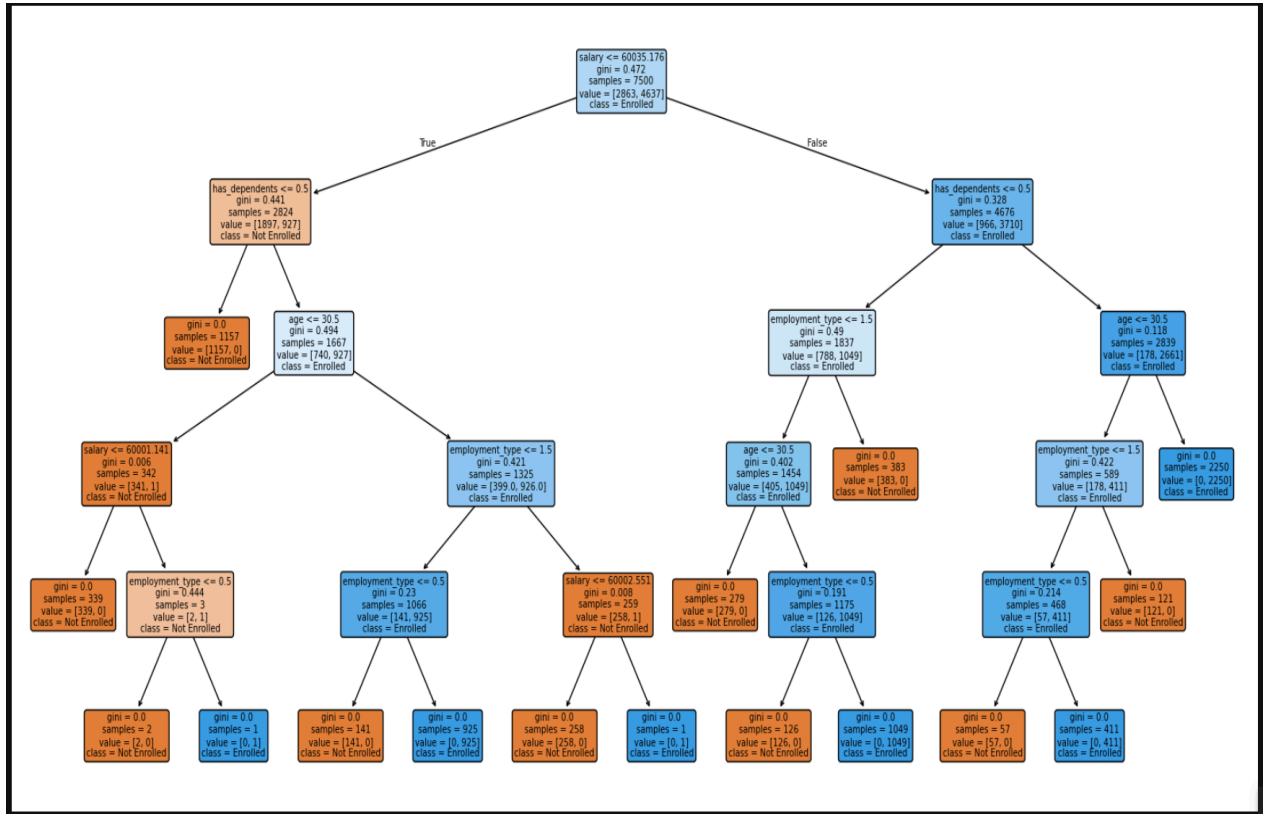
Insight:

Employment Type with **Age**, **salary** plays an important role but adding **has_dependents** pushes the visualization to more clarity. A simple plot below helps us to gain some understanding on this.



Model:

The Data Visualization throws clarity and the **Decision tree** would do the task like a charm enabling the same reasoning. We split our dataset in 75% train and 25% validation set.



Evaluations:

F1-score is a good metric for classification and the decision tree which is our base model can give descent results with interpretability.

	0	1	accuracy	macro avg	weighted avg
precision	0.998963	1.000000	0.9996	0.999481	0.9996
recall	1.000000	0.999349	0.9996	0.999675	0.9996
f1-score	0.999481	0.999675	0.9996	0.999578	0.9996
support	963.000000	1537.000000	0.9996	2500.000000	2500.0000