

## ClaVis Survey Results

These are the results of our survey amongst students in a machine learning course, as discussed in our conclusion section.

### Multiple Choice Answers

Table 1: How would you rate your current knowledge?

| Domain                                             | None | Beginner | Intermediate | Advanced | Expert |
|----------------------------------------------------|------|----------|--------------|----------|--------|
| Machine learning, deep learning and classification | 0    | 4        | 5            | 7        | 0      |
| Visualization and visual analytics                 | 0    | 1        | 9            | 5        | 0      |

Table 2: System Rating

| Question                                                  | Very easy | Easy | Medium | Difficult | Very difficult |
|-----------------------------------------------------------|-----------|------|--------|-----------|----------------|
| How easy do think it is to understand the visualizations? | 2         | 7    | 7      | 0         | 0              |
| How easy do think it is to use the tool?                  | 3         | 5    | 5      | 2         | 0              |

Table 3: Would you like to use the tool yourself? For what? (Multiple choice)

| Use case                                                    | N. of participants |
|-------------------------------------------------------------|--------------------|
| Comparing different classifier architectures / methods      | 14                 |
| Parameter tuning, finding the best classifier for a problem | 13                 |
| Creating images for presentations                           | 13                 |
| Comparing own classifiers to existing ones / competitors    | 12                 |
| Analyzing own classifiers / debugging                       | 8                  |
| I would not use it                                          | 0                  |
| Other                                                       | 0                  |

## Free text answers for features and improvements

- Smoothing for the history graphs, like in TensorBoard (from 2 participants, we added this)
- Extensions for reinforcement learning and domains where there is no static dataset
- Comparison of different feature extractions
- Feature visualization, e.g. highly correlated weights
- Visualize word embeddings of classifiers similar to the data view
- Add option to align bars in ranking to the left for better readability (we added this)
- Show the training hardware for each model to make sure they were trained under fair conditions
- The tool is powerful and has a steep learning curve, therefore the included help view is useful. I need a similar documentation for the plugin API (we added a tutorial)