Company/University

15 responses

- Appstick Ltd.
- BJIT
- USASK
- KDA
- Hericko
- Inosis
- Friedrich Schiller University Jena
- University of Potsdam
- BdREN
- University of Saskatchewan
- Siemens
- Ridge-I Inc

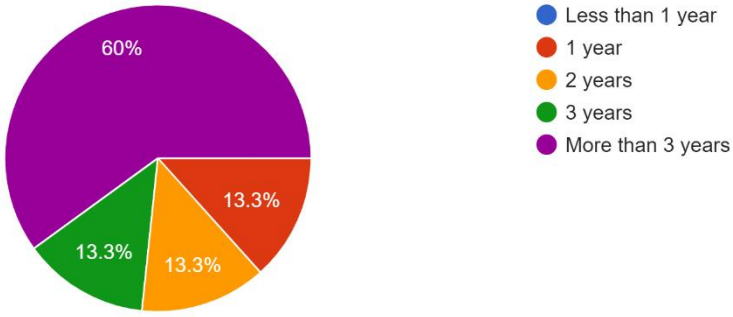
Country

15 responses

- Bangladesh
- Canada
- Slovenia
- Germany
- Belgium
- Japan

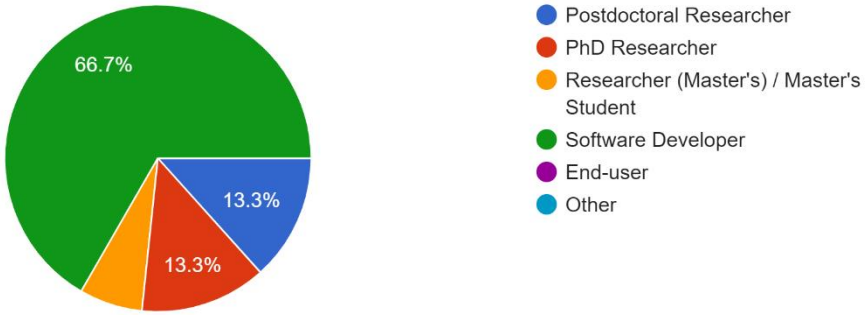
How many years are you working on Software Development/ Machine Learning/ Explainability?

15 responses



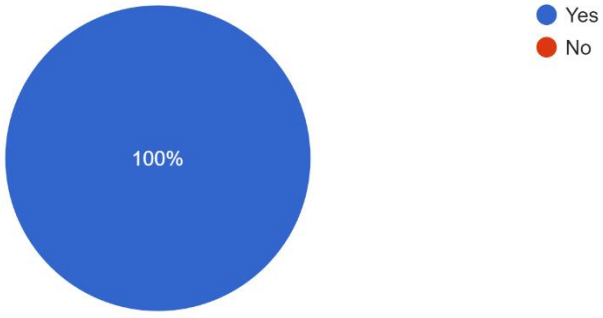
Please select your role (Options are below)

15 responses



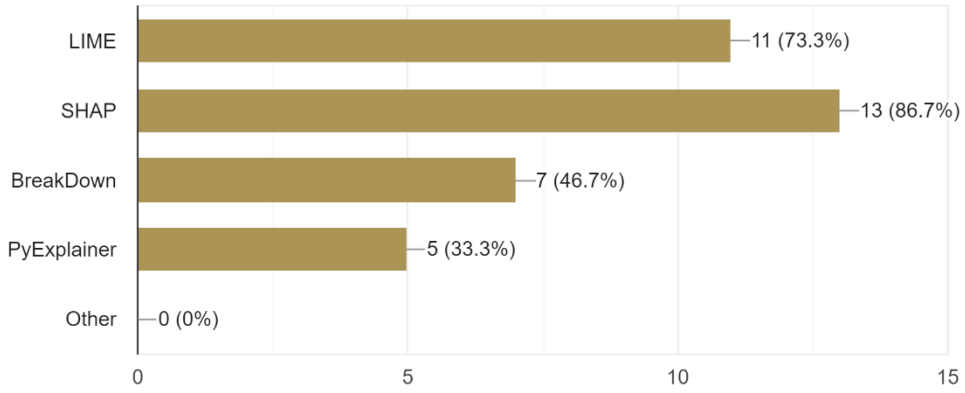
Have you used explainability methods in your work before?

15 responses



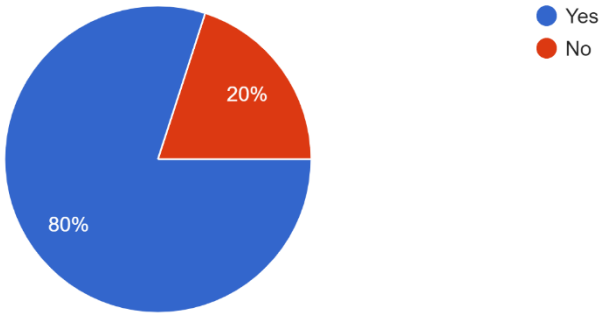
Which explainability methods do you use in your day-to-day workflow?

15 responses



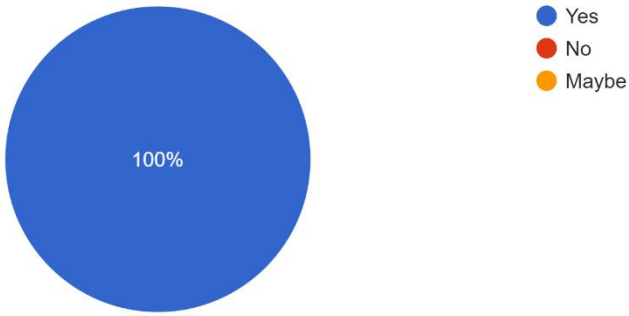
Do you encounter disagreement in the explanations generated by state-of-the-art methods in your daily workflow?

15 responses



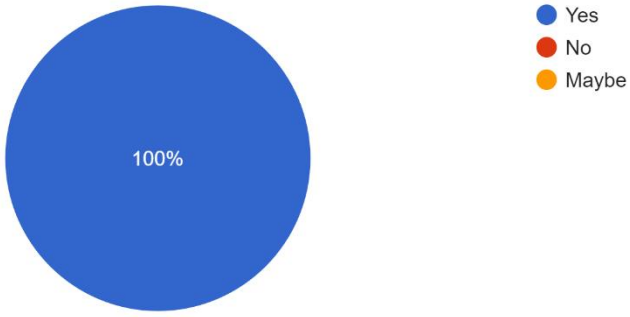
Is it understandable of Feature Agreement (FA)?

15 responses



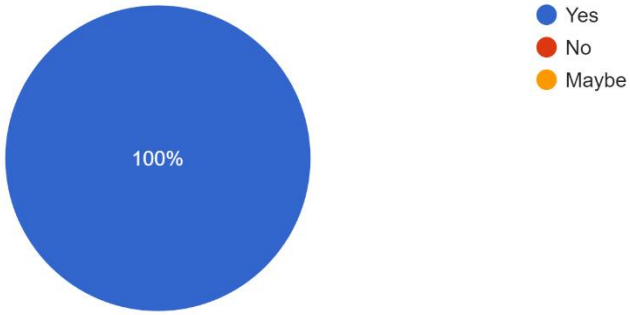
Is it understandable of Sign Agreement (SA)?

15 responses



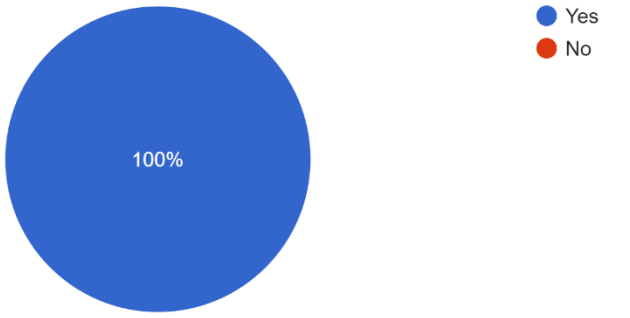
Is it understandable of Rank Agreement (RA)?

15 responses



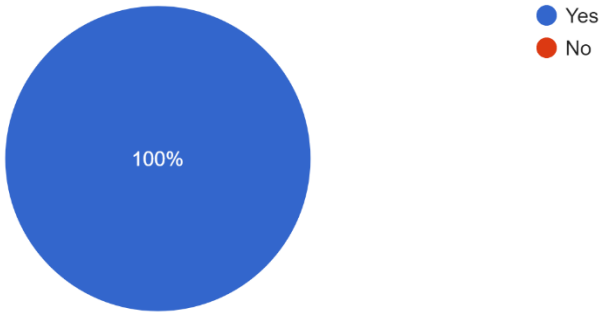
Does the Random Forest (RF) method consistently beat other machine learning models before and after data balancing, justifying its preference for ...e selection strategies to choose the best approach?

15 responses



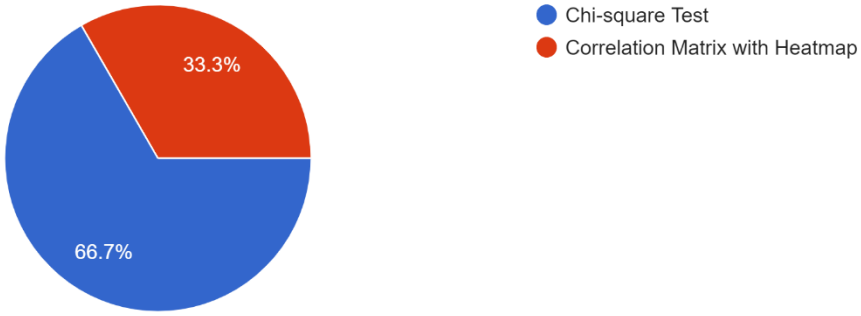
Feature Agreement: Feature Agreement among four explainers on Chi-square Test and Correlation Matrix with Heatmap for a buggy file. What are you...square Test and Correlation Matrix with Heatmap?

15 responses



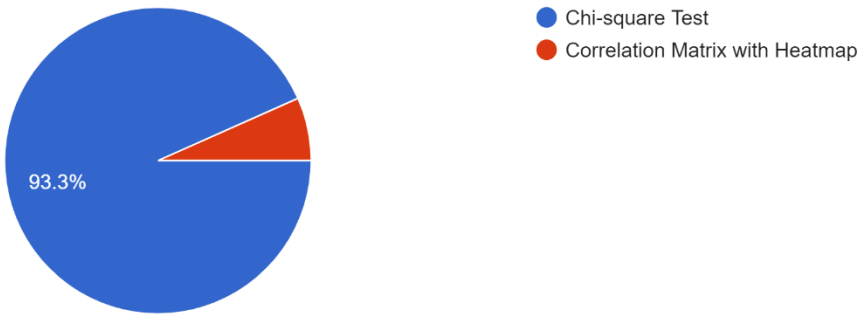
Rank Agreement : Rank Agreement among four explainers on Chi-square Test and Correlation Matrix with Heatmap for buggy file. Which technique has comparatively low disagreement?

15 responses



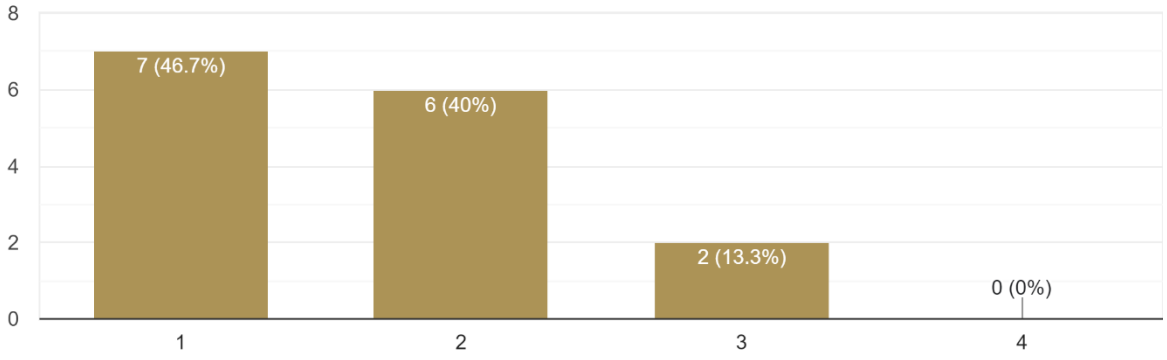
Sign Agreement: Sign Agreement among four explainers on Chi-square Test and Correlation Matrix with Heatmap for buggy file. Which technique has comparatively low disagreement?

15 responses



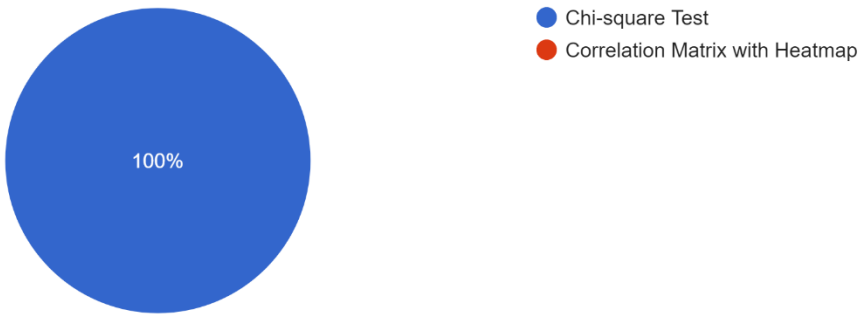
How does using feature selection methods like the Chi-square Test and the Correlation Matrix with Heatmap affect the outcomes of disagreements in ... shown above agree or disagree with each other?

15 responses



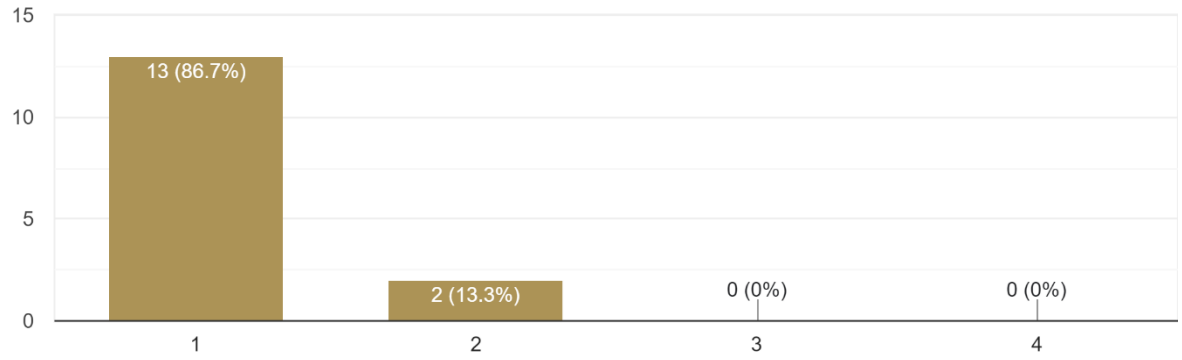
Which feature selection approach is better at minimizing disagreements between the Chi-square Test and Correlation Matrix with Heatma...g XAI approaches for software defect prediction?

15 responses



Is the feature engineering, especially in feature selection, truly reduces the disagreement between explanations?

15 responses



Do you have any suggestions that can help to reduce the disagreement between explainers?

15 responses

Ensure consistent preprocessing steps across all datasets to minimize variations that may lead to discrepancies in explainability

Use a combination of explainability methods and compare their outputs to identify consistent patterns and mitigate discrepancies.

Optimize feature selection techniques to focus on relevant features that contribute most to model predictions, reducing ambiguity in explanations.

Combine explanations from multiple models or explainers to obtain a more comprehensive and reliable understanding of model behavior.

Choose model architectures that prioritize interpretability, such as decision trees or linear models, to facilitate clearer explanations.

Develop validation methods to assess the consistency and reliability of explanations generated by different techniques across various datasets.

Do you have any suggestions that can help to reduce the disagreement between explainers?

15 responses

Rank features based on their importance scores to prioritize influential features and improve the consistency of explanations.

Balance the trade-off between model complexity and interpretability to minimize biases and variances that may affect explainability.

Incorporate domain-specific knowledge and context into the explanation process to enhance the relevance and accuracy of explanations.

Robust Validation Metrics

Transparency in Model Training

Document and communicate the model training process transparently, including hyperparameter settings, to enhance the reproducibility and trustworthiness of explanations.

Provide comprehensive documentation for explainability methods, including their assumptions, limitations, and recommended usage scenarios, to guide practitioners in their selection and interpretation

Foster collaboration between domain experts and data scientists to validate and refine explanations, leveraging diverse perspectives to enhance their accuracy and relevance.

Continuously evaluate and refine explainability methods based on feedback and real-world applications to adapt to evolving data and stakeholder needs