ArviZ is a collection of Python and Julia packages for the exploratory analysis of Bayesian models whose goal is to simplify all post-inference Bayesian workflow steps. These packages include functions for sample diagnostics, model checking and comparison, data storage, and analysis of distributions such as posteriors, priors, posterior predictions, etc, with compatibility with many probabilistic programming languages that have Python or Julia interfaces.

**APPLICATIONS**

Any area requiring statistical inference, specifically of the Bayesian flavor.

Examples include:

- Rocket supply chains
- Biomedical
- Experimentation and testing, both of the digital and physical types

**PLANNED FEATURES**

- Add additional newly researched diagnostics.
- Add prior sensitivity checks.
- Implement better interface for common operations with InferenceData objects.
- Improve integration of ArviZ.jl with Julia ecosystem by refactoring it into lightweight, modular packages, integrating with native Julia plotting packages, and introducing a storage-agnostic interface.
- Add additional diagnostic plots such as ECDF
**PROJECT NEEDS**

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Cost</th>
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</thead>
<tbody>
<tr>
<td>Funding dedicated time of posterior and ArviZ devs to work on their compatibility</td>
<td>$7,000</td>
</tr>
<tr>
<td>Hire expertise in interactive and real-time plotting to get started with ArviZ dashboard</td>
<td>$12,000</td>
</tr>
<tr>
<td>Hire a technical writer to enhance ArviZ documentation</td>
<td>$7,500</td>
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</tbody>
</table>

For more information on ArviZ, including our governance structure and project roadmap, please visit:  
https://arviz-devs.github.io/arviz/

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