

# Package: piiR (via r-universe)

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**Type** Package

**Title** Predictive Information Index ('PII')

**Version** 0.3.0

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**Description** A simple implementation of the Predictive Information Index ('PII').

**Encoding** UTF-8

**License** MIT + file LICENSE

**LazyData** true

**Imports** stats (>= 3.6.0)

**VignetteBuilder** knitr

**Suggests** knitr, rmarkdown

**RoxygenNote** 7.3.2

**Repository** <https://theotherdrwells.r-universe.dev>

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**RemoteUrl** <https://github.com/theotherdrwells/piir>

**RemoteRef** HEAD

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pii *Predictive Information Index (PII)*

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**Description**

Computes the Predictive Information Index using one of three methods: "r2" (R-squared ratio), "rm" (RMSE-based), or "v" (variance ratio).

**Usage**

```
pii(y, score_pred, full_pred = NULL, type = c("r2", "rm", "v"))
```

**Arguments**

y	Observed outcome vector.
score_pred	Predictions from score-based model.
full_pred	Predictions from the full model.
type	Character. One of "r2", "rm", or "v".

**Value**

A numeric value between 0 and 1.

**Examples**

```
set.seed(1)
y <- rnorm(100)
full <- y + rnorm(100, sd = 0.3)
score <- y + rnorm(100, sd = 0.5)
pii(y, score, full, type = "r2")
pii(y, score, full, type = "rm")
pii(y, score, full, type = "v")
```

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pii\_plot *Plot Score vs Outcome for Visual PII Insight*

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**Description**

Plot Score vs Outcome for Visual PII Insight

**Usage**

```
pii_plot(score, outcome, bins = 10)
```

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**Arguments**

score	Numeric score vector
outcome	Numeric outcome vector
bins	Number of bins for discretization

**Value**

A base R plot

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