

# Package: conditionalProbNspades (via r-universe)

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**Version** 1.0

**Date** 2024-09-30

**Title** Conditional Probabilities of Distributions Across Hearts Hands

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**Depends** R (>= 4.2.0)

**Description** Provides some tabulated data to be referred to in a discussion in a vignette accompanying my upcoming R package 'playWholeHandDriverPassParams'. In addition to that specific purpose, these may also provide data and illustrate some computational approaches that are relevant to card games like hearts or bridge. This package refers to authentic data from Gregory Stoll <<https://gregstoll.com/~gregstoll/bridge/math.html>>, and details of performing the probability calculations from Jeremy L. Martin <<https://jlmartin.ku.edu/~jlmartin/bridge/basics.pdf>>.

**License** GPL (>= 2)

**Encoding** UTF-8

**VignetteBuilder** knitr

**Suggests** knitr, rmarkdown, testthat (>= 3.0.0)

**RoxygenNote** 7.3.1

**Config/testthat/edition** 3

**NeedsCompilation** no

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

**RemoteUrl** <https://github.com/cran/conditionalProbNspades>

**RemoteRef** HEAD

**RemoteSha** 5da64fdf1f8adcae33dccc960fbb5ebbf597f5

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conditionalProbNspades  
*conditionalProbNspades*

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**Description**

computes an array of probabilities of number of spades in an opponent's (unknown) hand conditioned on the number of spades in my (known) hand

**Usage**

conditionalProbNspades(N)

**Arguments**

N                    N is the number of spades in my hand

**Value**

returns an array of probabilities of number of spades in an opponent's (unknown) hand conditioned on the number of spades in my (known) hand

**Author(s)**

Barry Zeeberg

**Examples**

```
x<-conditionalProbNspades(4)
```

---

conditionalProbNspadesDriver  
*conditionalProbNspadesDriver*

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**Description**

driver to invoke conditionalProbNspades

**Usage**

conditionalProbNspadesDriver()

**Value**

returns a matrix of conditional probabilities

**Author(s)**

Barry Zeeberg

**Examples**

x<-conditionalProbNspadesDriver()

---

cumulativeConditionalProbNspades  
*cumulativeConditionalProbNspades*

---

**Description**

compute cumulative probabilities from the matrix of conditional probabilities

**Usage**

cumulativeConditionalProbNspades()

**Value**

returns no value but has side effect of printing tables of cumulative probabilities

**Author(s)**

Barry Zeeberg

**Examples**

x<-cumulativeConditionalProbNspades()

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