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A Capitalized Title: Something about a Package foo

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Abstract

The abstract of the article.

Keywords: keywords, not capitalized, Java.

1. Introduction

This template demonstrates some of the basic latex you'll need to know to create a JSS article.

1.1. Code formatting

Don't use markdown, instead use the more precise latex commands:

- Java
- `plyr`
- `print("abc")`

2. R code

Can be inserted in regular R markdown blocks.

2.1. MVN

```
R> library(CuSMC)
R> mu = c(0, 0)
```

```
R> sigma = matrix(c(1, 0, 0, 1), nrow=2)
R> CuSMC::MVN(mu, sigma)
```

```
[1] -1.161507 -4.146704
```

2.2. MVNPDF

```
R> library(CuSMC)
R> x = c(0, 0)
R> mu = c(0, 0)
R> sigma = matrix(c(1, 0, 0, 1), nrow=2)
R> CuSMC::MVNPDF(x, mu, sigma)
```

```
[1] 0.1591549
```

2.3. MVT

```
R> library(CuSMC)
R> mu = c(0, 0, 0)
R> sigma = diag(3)
R> nu = 3.0
R> CuSMC::MVT(mu, sigma, nu)
```

```
[1] 3.091552 1.811468 -2.445105
```

2.4. MVTPDF

```
R> library(CuSMC)
R> x = c(0, 0, 0)
R> mu = c(0, 0, 0)
R> sigma = diag(3)
R> nu = 3.0
R> CuSMC::MVTPDF(x, mu, sigma, nu)
```

```
[1] 0.07799708
```

2.5. Metropolis-Hastings

```
R> library(CuSMC)
R> N = 100
R> w = rnorm(N, 0, 1)
R> B = 10
R> CuSMC::metropolis_hastings(w, N, B)
```

```
[1] 84 11 39 24 17 29 48 93 72 80 67 29 85 39  4 87 16 74 12 87 16 48 55 29 51
[26] 51 21 51 58 51 30 30 84 40 33 97 40 58 77 39 13 27 85 17 86 32 16  3 74 51
[51]  9 58 24 80 28 57 54 54 33 79 67 96  5 22 42 86  0 83 79 40 70 40 49 28 18
[76] 38 13 84 42 31 81 15 44  0 32 77 54 83 77 32 99 77 86 22 48 29  9  9 48 84
```

2.6. Installation

```
R> install.packages("devtools")
R> install.packages("githubinstall")
```

2.7. Installation 2

```
R> library(devtools)
R> library(githubinstall)
R> githubinstall("CuSMC")
R> library(CuSMC)
```

2.8. Installation 2

```
R> library(devtools)
R> library(githubinstall)
R> githubinstall("CuSMC")
```

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