

X_YLaTeX Article Template

Ruohong Jiao
First Institution

Second Name
Second Institution

Third Name
Third Institution

Fourth Name
Fourth Institution

Fifth Name
Fifth Institution

Abstract

Your abstract text goes here. Just a few facts. Whet our appetites. Not more than 200 words, if possible, and preferably closer to 150.

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1 section A: Lorem ipsum dolor sit amet, consectetur adipiscing elit.

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2 Introduction

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3 Background and Thread

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3.1 Background

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3.2 Thread

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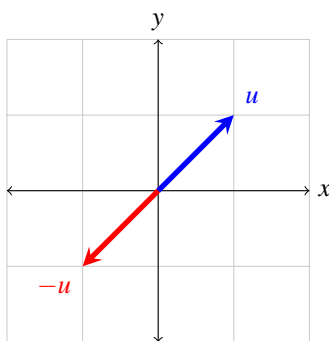


Figure 1: Text size inside figure should be as big as caption's text. Text size inside figure should be as big as caption's text. Text size inside figure should be as big as caption's text. Text size inside figure should be as big as caption's text. Text size inside figure should be as big as caption's text.

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4 Footnotes, Verbatim, and Citations

Footnotes should be places after punctuation characters, without any spaces between said characters and footnotes, like so.¹ And some embedded literal code may look as follows.

```
int main(int argc, char *argv[])
{
    return 0;
}
```

Now we're going to cite somebody. Watch for the cite tag. Here it comes. Arpachi-Dusseau and Arpachi-Dusseau co-authored an excellent OS book, which is also really funny [1], and Waldspurger got into the SIGOPS hall-of-fame due to his seminal paper about resource management in the ESX hypervisor [2].

The tilde character (~) in the tex source means a non-breaking space. This way, your reference will always be attached to the word that preceded it, instead of going to the next line.

And the 'cite' package sorts your citations by their numerical order of the corresponding references at the end of the paper, ridding you from the need to notice that, e.g, "Waldspurger" appears after "Arpachi-Dusseau" when sorting references alphabetically [1, 2].

It'd be nice and thoughtful of you to include a suitable link in each and every bibtex entry that you use in your submission, to allow reviewers (and other readers) to easily get to the cited work, as is done in all entries found in the References section of this document.

Now we're going take a look at Section 5, but not before observing that refs to sections and citations and such are colored and clickable in the PDF because of the packages we've included.

5 Floating Figures and Lists

Here's a typical reference to a floating figure: Figure 1. Floats should usually be placed where latex wants then. Figure1 is centered, and has a caption that instructs you to make sure that the size of the text within the figures that you use is as big as (or bigger than) the size of the text in the caption of the figures. Please do. Really.

In our case, we've explicitly drawn the figure inlined in latex, to allow this tex file to cleanly compile. But usually, your figures will reside in some file.pdf, and you'd include them in your document with, say, \includegraphics.

Lists are sometimes quite handy. If you want to itemize things, feel free:

fread a function that reads from a **stream** into the array **ptr** at most **nobj** objects of size **size**, returning returns the number of objects read.

Fred a person's name, e.g., there once was a dude named Fred who separated usenix.sty from this file to allow for easy inclusion.

The noindent at the start of this paragraph in its tex version makes it clear that it's a continuation of the preceding paragraph, as opposed to a new paragraph in its own right.

¹Remember that USENIX format stopped using endnotes and is now using regular footnotes.

5.1 LaTeX-ing Your TeX File

People often use `pdflatex` these days for creating pdf-s from tex files via the shell. And `bibtex`, of course. Works for us.

Acknowledgments

The USENIX latex style is old and very tired, which is why there's no `\acks` command for you to use when acknowledging. Sorry.

Availability

USENIX program committees give extra points to submissions that are backed by artifacts that are publicly available. If you made your code or data available, it's worth mentioning this fact in a dedicated section.

6 section B: long section title name for text, toc and header

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7 System Overview

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8 Latex Commands Examples

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- Nam dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.

9 test for mdframed

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In any right triangle, the area of the square whose side is the hypotenuse is equal to the sum of the areas of the squares whose sides are the two legs.

In any right triangle, the area of the square whose side is the hypotenuse is equal to the sum of the areas of the squares whose sides are the two legs.

An inhomogeneous linear differential equation has the form

$$L[v] = f, \tag{1}$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

Table 1: caption infomation.

System	Nodes	IPC	ROS-IF	ROS-N	SITL	Lic.
PX4	yes	yes	yes	yes	ROS	BSD
OpenPilot	yes	yes	no	no	no	GPL
APM	no	no	yes	no	yes	GPL
PPZ	no	no	yes	no	yes	GPL
MultiWii	no	no	yes	no	no	GPL

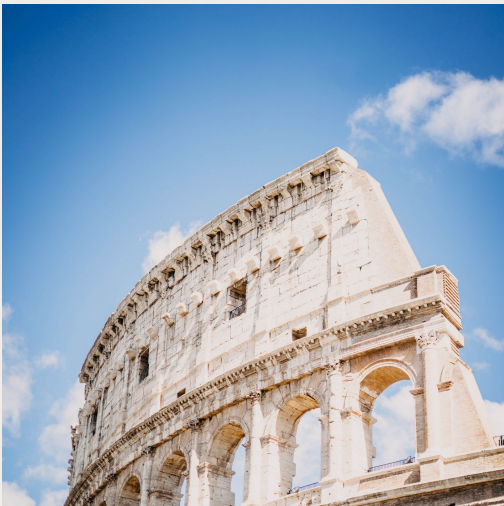


Figure 2: caption infomation.



Figure 3: caption infomation.



Figure 4: caption infomation.

Inhomogeneous linear

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (2)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

Inhomogeneous linear

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (3)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.



Definition 1

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (4)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

Definition 2: Inhomogeneous linear

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (5)$$

where L is a linear differential operator, v is the dependent variable, and f is a given non-zero function of the independent variables alone.

A section C

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B app A

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C Codes

```

1  import numpy as np
2
3  def incmatrix(genl1,genl2):
4      m = len(genl1)
5      n = len(genl2)
6      M = None #to become the incidence matrix
7      VT = np.zeros((n*m,1), int) #dummy variable
8
9      #compute the bitwise xor matrix
10     M1 = bitxormatrix(genl1)
11     M2 = np.triu(bitxormatrix(genl2),1)
12
13     for i in range(m-1):
14         for j in range(i+1, m):
15             [r,c] = np.where(M2 == M1[i,j])
16             for k in range(len(r)):
17                 VT[(i)*n + r[k]] = 1;
18                 VT[(i)*n + c[k]] = 1;
19                 VT[(j)*n + r[k]] = 1;
20                 VT[(j)*n + c[k]] = 1;
```



```

21
22         if M is None:
23             M = np.copy(VT)
24         else:
25             M = np.concatenate((M, VT), 1)
26
27         VT = np.zeros((n*m,1), int)
28
29     return M

```













































































































D Color Palettes











D.1 Single Color

 3b0084
  7474e0
  191035

D.2 Multi-Color

















































































































































1.  005e9a	 ff8400	 fed9d9		
2.  334854	 e04463	 efecea	 f99055	 e56cd6
3.  ed1010	 ff5151	 ffa0a0	 be0d71	 0a8d8e
4.  d01114	 f9b700	 f0e1b8		
5.  427dcd	 c0b9af	 fcdac6		
6.  005e9a	 ff8400	 fed9d9		
7.  e8643c	 d4c045	 98ccdd		
8.  427dcd	 c0b9af	 fcdac6		
9.  ab7e49	 0c3f5a	 f0cfa8	 ab5f49	 347954
10.  f5502f	 0382fe	 fbc000		
11.  1c37ee	 ff4400	 d8d0cd		
12.  567990	 4277bb	 bec4cf		
13.  cf211e	 464646	 dddddd	 f99055	 e56cd6
14.  f9b70e	 244d67	 f1d796	 f98c0e	 666ab7
15.  ab7e49	 0c3f5a	 f0cfa8	 ab5f49	 347954
16.  ff3366	 0c3f5a	 45e1d3	 20a4f3	 979797
17.  334854	 e04463	 efecea	 328080	 9fc84e
18.  d01114	 f9b700	 f0e1b8		
19.  737495	 f17d81	 e7efde	 d6bd9d	 677b89
20.  334854	 e04463	 efecea	 20a4f3	 979797
21.  cf211e	 464646	 dddddd		
22.  f9b70e	 244d67	 f1d796	 f98c0e	 666ab7
23.  5749d9	 ae6bdf	 2eecf8	 fff33b	 e968bc
24.  86bcd8	 c1bd97	 a8c1ce	 7d637e	 99ad88































25.		334854		e04463		efceea				
26.		aced15		a1918e		b4adea		bebbbb		ef798a
27.		616161		1dc2e5		aeedb db		ffab1a		ff571a
28.		4e828b		71aaa7		b6d8d5				
29.		5749d9		ae6bdf		2eecf8				
30.		cf211e		464646		dddddd		328080		9fc84e
31.		ff3366		0c3f5a		45e1d3		20a4f3		979797
32.		00adb5		0c3f5a		f8b500		ff0700		979797
33.		567990		4277bb		bec4cf		94ae89		896978
34.		f9b70e		244d67		f1d796		ff0700		979797
35.		567990		4277bb		bec4cf		94ae89		896978
36.		00adb5		0c3f5a		f8b500		ff0700		979797
37.		00adb5		0c3f5a		f8b500		ff0700		979797
38.		ebb200		a5a5a5		67c394		826c7f		ebal a1
1.		090002		2c0403		841b13		b5271c		e33426
		e85e59		eea4a3						
2.		62d5c4		eeb0bc						
3.		040653		ea3624						
4.		f96167		fce77d						
5.		f9d342		292826						
6.		df678c		3d155f						
7.		ccf381		4831d4						
8.		4a274f		f0a07c						
9.		2b3252		ef5455		fad744				
10.		fff748		3c1a5b						
11.		2f3c7e		fbeaeb						
12.		ec4d37		1d1b1b						
13.		8bd8bd		243665						
14.		141a46		ec8b5e						
15.		fffff		8aaae5						
16.		295f2d		ffe67c						
17.		f4a950		161b21						
18.		eb2188		080a52						
19.		4a171e		e2a144						
20.		d2302c		f7f7f9						

21.		358597		f4a896			
22.		e7d045		a04ef6			
23.		262223		ddc6b6			
24.		f4efea		7d141d		ff1e27	
25.		aa96da		c5fad5		ffffd2	
26.		f7f7f7		006838		96cf24	
27.		234e70		fbf8be			
28.		ffe8f5		8000ff		de00ff	
29.		191919		b88746		fdf5a6	
30.		cc313d		f7c5cc			
31.		e2d3f4		013dc4			
32.		533549		f6b042		f9ed4e	
33.		99f443		ec449b			
34.		050505		616161		e6e7e8	
35.		ee4e34		fcdda			
36.		072c50		b88746		fdf5a6	
37.		96351e		dbb98f			
38.		e2d1f9		317773			
1.		344150		4fa9d2		f0dd5d	 81bf97  df6756
2.		4a154b		64c3eb		5bb381	 e3b34c  ce375c
3.		250c77		ed642b		ffffff	
4.		ffe01b		000000			
5.		d8318a		f26c7d		e37439	
6.		4daaa7		3f8f8b		333333	
7.		3d8c95		225675		e6873c	
8.		8fd974		7ac968		5bb462	 4ca456  394141
9.		d9302c		ec692d		eea23f	
10.		fcb711		f37021		cc004c	 6460aa  0089d0
		0db14b					
11.		ff6e0c		f20c90			
12.		83d1c4		78517c		f17950	
13.		0046bf		feef22		ffffff	
14.		f26764		ffffff			
15.		687818		ffd58e		3c1605	ffffff
16.		54afbcb		ffb449		fe5c36	 434343

17.		00a9a4		f9b117		f6911b				
18.		072f54		fbcb08						
19.		ff6600		000000		ffffff				
20.		fcd206		f18121		7582c0		b2aa7e		d5df37
		58b1ce		76c065		000000				
21.		f82b60		fcbb401		19c0ff				
22.		70c19a		939393						
23.		7894ff		ff4f2d		ff8b74		ff89ff		e6ebff
24.		f224f2		ffffff						
25.		ff6d56		fa9233		ffbe0a		8ac539		57b7dd
		a98cbc								
26.		cfb08d		ffffff						
27.		ff3d57		ffca00		00d748		434343		
28.		2d2d2b		ec9347						
29.		1c4481		60688d		5b8ba1		b4d5de		c7233b
		e47a2e		f28d1b						
30.		1dcdfc		21d0b2		34f5c5		2f455c		
31.		ee9142		265b94						
32.		e27043		ffffff						
33.		80cfd5		007d98		6dc3cc		ffffff		
34.		91c11e		659a41		ffffff				
35.		f5b4a7		000000						
36.		c9d85b		e1251a		ffcd2e		28a9e0		
37.		00bcb0		5630ff						
38.		191035		ffffff						
39.		93c244		3982d8		7da739				
40.		d94d5c		ebc354						
41.		4ca9ee		238878		5ecd81		b2b7bb		
42.		263571		feda14						
43.		000000		1a1a1a		f2cf19		ffffff		
44.		da868a		417584						
45.		39827e		ec7345						
46.		f84d08		4e1d07		fdee50				
47.		293345		f95665		f95f7f		fb7e51		fda022
48.		52b1b6		d5d156		f4cd5c		b8428d		d85f9a
		e17a8c		de713e		d23d46		c83b52		404040

49.	 21455b  f4c7b5	 f9da9f  c2e2c6	 5ec3f7  b5f3d4	 adaed4  94a2f8	 aee1fb  bcdf5f
50.	 4297c8	 0e3692			
1.	 f4b41a	 143d59			
2.	 210070	 213970			
3.	 ffe042	 e71989			
4.	 ffa781	 5b0e2d			
5.	 00e1d9	 5e001f			
6.	 060d4d	 f49f1c			
7.	 0e387a	 9fafca			
8.	 a9dce3	 7689de			
9.	 fcc729	 337def			
10.	 efc8b1	 514644			
11.	 5e057e	 c299d0			
12.	 551fbd	 a2each			
13.	 ff8b1	 993441			
14.	 bdf6	 e23c52			
15.	 390879	 b8df10			
16.	 a3842c	 575200			
17.	 008970	 99eedf			
18.	 efc8b1	 8a6626			
19.	 0f4d19	 6fc27c			
20.	 e54b22	 abd1ff			
21.	 0f149a	 fd9b4d			
22.	 bfbf14	 0029a5			
23.	 f6b60d	 372800			
24.	 4955fd	 a5e300			
25.	 f2bc94	 30110d	 722620		
26.	 6dd47e	 ffd55a	 f4af1b		
27.	 104c91	 efc9af	 1f8ac0		
28.	 283350	 f93800	 ff500		
29.	 f9858b	 ed335f	 761137		
30.	 f2bc94	 00154f	 f4af1b		
31.	 4b3d8f	 37a987	 b7b1d2		
32.	 455073	 c0904d	 6077c0		

33.		4d3227		ebc999		cd7700				
34.		3d4c41		999999		e6e6e6				
35.		cedef0		9d9ad9		6b9bd1				
36.		7b3433		c86797		e9bbba				
37.		ebebde		777764		4f4747				
38.		64395f		c075b7		6caca0				
39.		388d5d		d6a34a		5a431b				
40.		241f1c		937047		e7dac7				
41.		404040		a0b6f7		f2f261				
42.		1d5c96		7db0de		12395d				
1.		e8ebc2		d4a656		e16e79		364eb9		228fcf
2.		fbf4b5		fff9d4		c1a87d		d3a13b		b58d3d
3.		e3dbd8		a6a29e		583629		7e4d4e		ef5c4e
4.		bd3b1b		d8a800		b9d870		b6c61a		006344
5.		fale44		fec925		c9e3db		5ab190		00b4eb
6.		ec380b		f05f3b		a5c5c3		429f9e		007872
7.		231f20		ffffff		ffc602		f2c9a0		f2b54a
8.		ee801e		e75b10		000000		d6d1ce		e3e0dd
9.		cb534f		c48f22		53a586		4faed9		6d78bf
10.		ffce1e		0086ff		f2f3f2		feb607		1592d8
11.		2b3990		c49a6c		f2f3f2		374396		5970af
12.		b0d5d0		6fc0ab		ffdee5		e2b1cd		fee8db
13.		84cfcf		ffed90		efe1d4		f6e6e7		f2f7fb
14.		dc4e76		cc4b93		a946be		5c4ae4		35375a
15.		5cd89f		ff5c3e		ffd36e		005d68		545454
16.		88d840		67b826		247209		dad8db		2a351f
17.		e86835		f64e00		cc4201		e0e2ec		b4b3a9
18.		ff5851		f3c130		414a6b		1c1b20		b49a85
19.		f76c6c		f99797		23305e		a8d0e6		39424e
20.		007ee5		ffffff		7b8994		47525d		3d464d
21.		3cba54		f4c20d		db3236		4885ed		bdbdbd
22.		161626		3b3a4a		1ebad6		c0c0c8		f2f2f4
23.		080501		d48b00		dba401		efd319		dddcdd
24.		3ae8b0		19afd0		6967ce		ffb900		fd636b
25.		808083		79c141		addfe9		891d02		46aa42

26.	 000000	 ed5338	 321119	 86754e	 949091
27.	 080808	 f7d624	 fbc702	 d5cabb	 308eab
28.	 ffffff	 e5e5e5	 b56a16	 7a392c	 161c14
29.	 ffffff	 1db954	 b56a16	 f9d03b	 f37778
30.	 ff5a5f	 00a699	 fc642d	 484848	 767676
31.	 e0798c	 65365a	 da8886	 cfc4c4	 dfd7ca

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