

LOGO  
institution

Main-Logo

# Project Report

A  $\text{\LaTeX}$  class

First Author *et al.*

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LUMINA

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# chapter A: Lorem ipsum dolor sit amet, consectetur adipiscing elit.

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## 1.1 Introduction

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## 1.2 Background and Thread

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### 1.2.1 Backgroud

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### 1.2.2 Thread

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## 1.3 Footnotes, Verbatim, and Citations

Footnotes should be placed after punctuation characters, without any spaces between said characters and footnotes, like so.<sup>1</sup> 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 to take a look at Section 1.4, 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.

## 1.4 Floating Figures and Lists

Here's a typical reference to a floating figure: Figure 1.1. Floats should usually be placed where latex wants them. Figure 1.1 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.

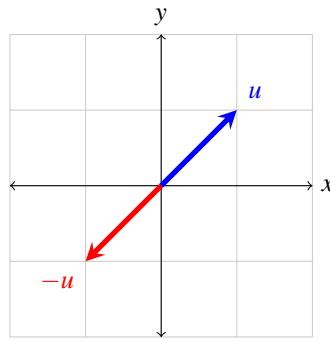
In our case, we've explicitly drawn the figure inlined in latex, to allow this tex file to cleanly compile. But usually, your figures will reside in some file.pdf, and you'd include them in your document with, say, \includegraphics.

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 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.



**Figure 1.1:** 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.

### 1.4.1 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.

## 2

## chapter B: long chapter title name for text, toc and header

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### 2.1 System Overview

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3

Latex Commands Examples

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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.

Table 3.1: 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 3.1:** caption infomation.



**Figure 3.2:** caption infomation.



**Figure 3.3:** caption infomation.

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (3.1)$$

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.

### Inhomogeneous linear

An inhomogeneous linear differential equation has the form

$$L[v] = f, \quad (3.2)$$

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

$$L[v] = f, \quad (3.3)$$

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

$$L[v] = f, \quad (3.4)$$

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

$$L[v] = f, \quad (3.5)$$

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

## chapter C

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## A.1 app A

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## A.2 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
```

### A.3 Color Palettes

#### A.3.1 Single Color

3b0084


































































































7474e0

191035

#### A.3.2 Multi-Color


















































































1.	<div></div> 005e9a	<div></div> ff8400	<div></div> fed9d9		
2.	<div></div> 334854	<div></div> e04463	<div></div> efecea	<div></div> f99055	<div></div> e56cd6
3.	<div></div> ed1010	<div></div> ff5151	<div></div> ffa0a0	<div></div> be0d71	<div></div> 0a8d8e
4.	<div></div> d01114	<div></div> f9b700	<div></div> f0e1b8		
5.	<div></div> 427dcd	<div></div> c0b9af	<div></div> fcdac6		
6.	<div></div> 005e9a	<div></div> ff8400	<div></div> fed9d9		
7.	<div></div> e8643c	<div></div> d4c045	<div></div> 98ccdd		
8.	<div></div> 427dcd	<div></div> c0b9af	<div></div> fcdac6		
9.	<div></div> ab7e49	<div></div> 0c3f5a	<div></div> f0cfa8	<div></div> ab5f49	<div></div> 347954
10.	<div></div> f5502f	<div></div> 0382fe	<div></div> fbcb00		
11.	<div></div> 1c37ee	<div></div> ff4400	<div></div> d8d0cd		
12.	<div></div> 567990	<div></div> 4277bb	<div></div> bec4cf		
13.	<div></div> cf211e	<div></div> 464646	<div></div> dddddd	<div></div> f99055	<div></div> e56cd6
14.	<div></div> f9b70e	<div></div> 244d67	<div></div> f1d796	<div></div> f98c0e	<div></div> 666ab7
15.	<div></div> ab7e49	<div></div> 0c3f5a	<div></div> f0cfa8	<div></div> ab5f49	<div></div> 347954
16.	<div></div> ff3366	<div></div> 0c3f5a	<div></div> 45e1d3	<div></div> 20a4f3	<div></div> 979797
17.	<div></div> 334854	<div></div> e04463	<div></div> efecea	<div></div> 328080	<div></div> 9fc84e
18.	<div></div> d01114	<div></div> f9b700	<div></div> f0e1b8		
19.	<div></div> 737495	<div></div> f17d81	<div></div> e7efde	<div></div> d6bd9d	<div></div> 677b89
20.	<div></div> 334854	<div></div> e04463	<div></div> efecea	<div></div> 20a4f3	<div></div> 979797
21.	<div></div> cf211e	<div></div> 464646	<div></div> dddddd		
22.	<div></div> f9b70e	<div></div> 244d67	<div></div> f1d796	<div></div> f98c0e	<div></div> 666ab7
23.	<div></div> 5749d9	<div></div> ae6bdf	<div></div> 2eecf8	<div></div> fff33b	<div></div> e968bc
24.	<div></div> 86bcd8	<div></div> c1bd97	<div></div> a8c1ce	<div></div> 7d637e	<div></div> 99ad88
25.	<div></div> 334854	<div></div> e04463	<div></div> efecea		
26.	<div></div> aced15	<div></div> a1918e	<div></div> b4adea	<div></div> bebbbb	<div></div> ef798a
27.	<div></div> 616161	<div></div> 1dc2e5	<div></div> aeebdb	<div></div> ffab1a	<div></div> ff571a




















































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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		eba1a1
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.		ffffff		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						
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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.		fc711		f37021		cc004c		6460aa		0089d0
		0db14b								
11.		ff6e0c		f20c90						
12.		83d1c4		78517c		f17950				
13.		0046bf		feef22		ffffff				
14.		f26764		fffff						
15.		687818		ffd58e		3c1605		fffff		
16.		54afbc		ffb449		fe5c36		434343		
17.		00a9a4		f9b117		f6911b				
18.		072f54		fb108						
19.		ff6600		000000		fffff				

20.	 fcd206  58b1ce	 fl8121  76c065	 7582c0  000000	 b2aa7e	 d5df37
21.	 f82b60	 fcb401	 19c0ff		
22.	 70c19a	 939393			
23.	 7894ff	 ff4f2d	 ff8b74	 ff89ff	 e6ebff
24.	 f224f2	ffffff			
25.	 ff6d56  a98cbc	 fa9233	 ffbe0a	 8ac539	 57b7dd
26.	 cfb08d	ffffff			
27.	 ff3d57	 ffca00	 00d748	 434343	
28.	 2d2d2b	 ec9347			
29.	 1c4481  e47a2e	 60688d  f28d1b	 5b8ba1	 b4d5de	 c7233b
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	 fedal4			
43.	 000000	 1a1a1a	 f2cf19	ffffff	
44.	 da868a	 417584			
45.	 39827e	 ec7345			
46.	 f84d08	 4e1d07	 fdee50		
47.	 293345	 f95665	 f95f7f	 fb7e51	 fda022
48.	 52b1b6  e17a8c	 d5d156  de713e	 f4cd5c  d23d46	 b8428d  c83b52	 d85f9a  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		a2eacb	
13.		ffb8b1		993441	
14.		bdfff6		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
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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.	 ebebdde	 777764	 4f4747		
38.	 64395f	 c075b7	 6caca0		
39.	 388d5d	 d6a34a	 5a431b		
40.	 241f1c	 937047	 e7dac7		
41.	 404040	 a0b6f7	 f2f261		
42.	 1d5c96	 7db0de	 12395d		
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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.	 84cfcb	 ffed90	 efe1d4	 f6e6e7	 f2f7fb
14.	 dc4e76	 cc4b93	 a946be	 5c4ae4	 35375a
15.	 5cd89f	 ff5c3e	 ffd36e	 005d68	 545454
16.	 88d840	 67b826	 247209	 dad8db	 2a351f
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18.	 ff5851	 f3c130	 414a6b	 1c1b20	 b49a85
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20.	 007ee5	 ffffff	 7b8994	 47525d	 3d464d
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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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