

ECE 445  
SENIOR DESIGN LABORATORY  
INDIVIDUAL PROGRESS REPORT  
Project #114

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**AN AWESOME PROJECT MADE BY AN  
AMAZING TEAM**

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## **Abstract**

Put your abstract here

**Keywords** Keyword 1, keyword 2, keyword 3

# Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
1.1	Problem statement . . . . .	1
1.2	Importance . . . . .	1
1.3	Literature Review . . . . .	1
<b>2</b>	<b>Methodology</b>	<b>2</b>
<b>3</b>	<b>Results</b>	<b>3</b>
<b>4</b>	<b>Discussion</b>	<b>4</b>
<b>5</b>	<b>Conclusion</b>	<b>5</b>
	<b>References</b>	<b>6</b>
<b>A</b>	<b>Example</b>	<b>7</b>
A.1	Some Test Data . . . . .	7
A.2	Derivation of Square Law . . . . .	7

# 1 Introduction

## 1.1 Problem statement

This is a sample document of this template, and here comes citation. You can cite [1], [2] and [3]. However, putting citation at the end of a sentence is also acceptable [4].

## 1.2 Importance

$$f(x) = \sum_{n=0}^{\infty} \frac{1}{n!} f^{(n)}(x_0) (x - x_0)^n, x \in U(x_0) \quad (1.1)$$

$$\begin{aligned} e^{ix} &= 1 + ix + \frac{1}{2!} (ix)^2 + \frac{1}{3!} (ix)^3 + \cdots \frac{1}{n!} (ix)^n + \cdots \\ &= 1 + ix - \frac{1}{2!} x^2 - i \frac{1}{3!} x^3 + \frac{1}{4!} x^4 + i \frac{1}{5!} x^5 - \cdots \\ &= \left(1 - \frac{1}{2!} x^2 + \frac{1}{4!} x^4 - \cdots\right) + i \left(x - \frac{1}{3!} x^3 + \frac{1}{5!} x^5 - \cdots\right) \\ &= \cos x + i \sin x \end{aligned} \quad (1.2)$$

## 1.3 Literature Review

This is a sample listing.

```

1 #include<stdio.h>
2 void fuzzy(int x){
3     return x;
4 }
5 int main(){
6     int a = 0, b, c;
7     scanf("%d", &b);
8     c = b;
9     if (a == b)
10         a = fuzzy(c);
11     else
12         b = fuzzy(a);
13     printf("%d_ %d\n", a, fuzzy(c));
14     return 0;
15 }
```

## 2 Methodology

Test the ability<sup>1</sup> to print some units, say (in texts),  $10 \times 10^5 \mu\text{m} \cdot \Omega \cdot ^\circ$ .

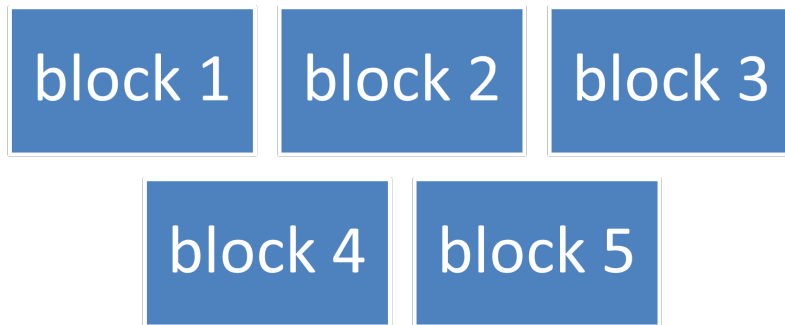
It also applies to equations,

$$R_t = 10 \times 10^5 \mu\text{m} \cdot \Omega \cdot ^\circ \tag{2.1}$$

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<sup>1</sup>This is an example footnote.

### 3 Results



**Figure 3.1** An example figure.

## **4 Discussion**

## **5 Conclusion**



## References

- [1] F. Author1 and S. Author2, *Random Book*. Publisher, 2022.
- [2] F. Author3 and S. Author4, “Random journal paper,” *Journal of Randomness*, vol. 10, no. 2, pp. 100–120, 2021.
- [3] F. Author7 and S. Author8, *New Book*. Publisher, 2023.
- [4] F. Author5 and S. Author6. “Random webpage.” (2020), [Online]. Available: <https://www.example.com> (visited on 01/01/2022).

## A Example

An example piece of code:

```
1 from numpy import *
2 from scipy import *
3
4 # plot some random plots of a random variable
5 def plot_random():
6     import matplotlib.pyplot as plt
7     plt.plot(random.randn(100))
8     plt.show()
9
10 # call the plotting function
11 plot_random()
```

### A.1 Some Test Data

### A.2 Derivation of Square Law

## **Acknowledgement**

Thank you thank you!