

# RSA and El-Gamal Cryptosystems

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**Abstract**—In this paper we discuss the RSA and El-Gamal cryptosystem. Alongside we introduce our way of implementing them in Python and C.

**Keywords**—RSA, EL-Gamal, Implementation, Public Key, Cryptosystem

## 1 INTRODUCTION

THIS demo file is intended to serve as a “starter file” for IEEE Computer Society journal papers produced under L<sup>A</sup>T<sub>E</sub>X using IEEEtran.cls version 1.7 and later. I wish you the best of success.

mds  
January 11, 2007

### 1.1 Subsection Heading Here

Subsection text here.

## 2 PUBLIC KEY CRYPTOSYSTEM

PKCS

### 2.1 More Details

Some problems with this template...I mean, the subsubsection part.

## 3 RSA

This is just another testing case.

## 4 EL-GAMAL

I was so damn amazed by the power of Emacs. So damn powerful!

This is just another testing text. To test [1].

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## 5 IMPLEMENTATION

Implementation process will be discussed here.

## 6 CONCLUSION

Conclusion and Contributions.

## APPENDIX A

### PROOF OF THE FIRST ZONKLAR EQUATION

Appendix one text goes here.

## APPENDIX B

### SOME RELATED MATH STUFF WILL BE DISPLAYED HERE

Appendix two text goes here.

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## REFERENCES

- [1] S. Pohlig and M. Hellman, “An improved algorithm for computing logarithms over  $gf(p)$  and its cryptographic significance (corresp.),” *Information Theory, IEEE Transactions on*, vol. 24, no. 1, pp. 106–110, 1978.

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