VISVESVARAYA TECHNOLOGICAL UNIVERSITY

"Inana Sangama", Belgaum - 590014, Karnataka



CRYPTOGRAPHY AAT REPORT

ChaCha20

Submitted by

Sarthaka Mitra GB (1BM23CS305) Shaikh Uzair Ahmed (1BM23CS307) Shashank U (1BM23CS314) Subramanya J (1BM23CS343)

Under the Guidance of

Dr. Nandhini Vineeth
Associate Professor
Department of CSE
B. M. S. College Of Engineering

in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING



B. M. S. College Of Engineering

(Autonomous Institution under VTU)

BENGALURU - 560019

February 2025 to June 2025

B. M. S. College Of Engineering,

Bull Temple Road, Bengaluru 560019

(Affiliated To Visvesvaraya Technological University, Belgaum)

Department of Computer Science and Engineering



CERTIFICATE

This is to certify that the project work entitled ChaCha20, carried out by Sarthaka Mitra GB (1BM23CS305), Shaikh Uzair Ahmed (1BM23CS307), Shashank U (1BM23CS314), Subramanya J (1BM23CS343), who are bonafide students of B. M. S. College of Engineering, is in partial fulfillment for the award of Bachelor of Engineering in Computer Science and Engineering of Visvesvaraya Technological University, Belgaum during the year 2024-2025. The AAT has been approved as it satisfies the academic requirements of the course CRYPTOGRAPHY (23CS4ESCRP) work prescribed for the said degree.

Signature of the Guide Signature of the HOD

Dr. Nandhini Vineeth Dr. Kavita Sooda

Associate Professor Professor and Head

Department of CSE Department of CSE

B. M. S. College Of Engineering

B. M. S. College Of Engineering

Name of the Examiner Signature with Date

B. M. S. College Of Engineering, Department of Computer Science and Engineering



Declaration

We, Sarthaka Mitra GB (1BM23CS305), Shaikh Uzair Ahmed (1BM23CS307), Shashank U (1BM23CS314), Subramanya J (1BM23CS343), students of 4th Semester, B.E, Department of Computer Science and Engineering, BMS College of Engineering, Bengaluru, hereby declare that this AAT entitled ChaCha20 has been carried out by us under the guidance of Dr. Nandhini Vineeth, Associate Professor, Department of CSE, B. M. S. College Of Engineering, Bangalore, during the academic semester April 2025 - August 2025.

We also declare that, to the best of our knowledge and belief, the development reported here is not a part of any other report by any other students.

Signatures

Sarthaka Mitra GB (1BM23CS305)

Shaikh Uzair Ahmed (1BM23CS307)

Shashank U (1BM23CS314)

Subramanya J (1BM23CS343)

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Introduction

ChaCha20 [1].

Chapter 2 Methodology

Chapter 3

Results and Discussion

Chapter 4

Conclusion and Future Work

Bibliography

[1] Daniel J Bernstein et al. Chacha, a variant of salsa 20. In Workshop record of SASC, volume 8, pages 3–5. Citeseer, 2008.