

Sriaditya Vedantam

Curriculum Vitae

Name: Sriaditya Vedantam (professionally: Sri Vedantam)

EDUCATION

University of Georgia

Bachelor of Science, Mathematics, Computer Science 2026
Certificates, Theoretical Computer Science, Cybersecurity and Privacy

RESEARCH INTERESTS

Algebraic Geometry with extensions onto Discrete Mathematics.
Interested in post-quantum cryptographic algorithms and homomorphic encryption.

RESEARCH POSITIONS

University of Georgia

Undergraduate Research 2025 –
Small Satellite Research Lab – Topological Data Scientist
Implementing and optimizing neural network with Topological Data Analysis.
Working with NeRF (Neural Radiance Fields) with satellite imaging and drone data.
Directly implementing research from Algebraic Geometry and Topology.
Focus on Exceptional Lie Algebras and their connections to Coxeter-Dynkin Diagrams. Spring 2024
Directed Reading Program Mentee
Spring – Focus on Birch and Swinnerton-Dyer Conjecture 2025
Fall – Focus on Kähler Manifolds and Complex Geometry 2024
Spring – Focus on Fermat’s Little Theorem 2023
Fall – Focus on Elliptic Curves 2021

Georgia Institute of Technology

Research Project
Application into Applied Combinatorics.
Research project involving Dijkstra’s algorithm with Eulerian Circuits.
Implementation involved using open maps and coding in Java.
ImaginaryCTF 2020 – 2023
Created cryptographic problems using more efficient algorithms from IACR*.
Increased proficiency in reading research papers and applying them to cybersecurity projects.

TEACHING EXPERIENCE

University of Georgia

Math Tutor 2023 –
Helped tutor precalculus, calculus, and introductory proofs classes.
Peer Learning Assistant 2022 – 2023
Calculus II for Scientists and Engineers
Calculus III for Scientists and Engineers

ACADEMIC TALKS

<i>Primes and Fakes, Carmichael and the Twisted Prime Omega Function</i>	Fall 2023
University of Georgia Directed Reading Program Student Seminar, Athens, GA	
<i>Rational Solutions to Pythagorean Triples</i>	Spring 2023
University of Georgia Directed Reading Program Student Seminar, Athens, GA	

HONORS AND AWARDS

Kossack Exam	2023
Placed 3 rd place in the 2023 UGA Kossack Calculus Exam.	

COURSEWORK

<i>MATH 2250: Calculus I</i>	Fall 2022
<i>MATH 2260: Calculus II</i>	Spring 2023
<i>CSCI 2610: Discrete Mathematics</i>	Spring 2023
<i>MATH 3200: Introduction to Mathematical Proofs</i>	Spring 2023
<i>MATH 2700: Elementary Differential Equations</i>	Summer 2023
<i>MATH 2500: Calculus III</i>	Fall 2023
<i>MATH 3100: Introduction to Mathematical Analysis</i>	Fall 2023
<i>MATH 6000: Abstract Algebra I</i>	Fall 2023
<i>CSCI 1730: Systems Programming in C</i>	Fall 2023
<i>MATH 3000: Linear Algebra</i>	Spring 2024
<i>MATH 6010: Abstract Algebra II</i>	Spring 2024
<i>CSCI 2720: Data Structures</i>	Summer 2024
<i>MATH 6100: Real Analysis</i>	Fall 2024
<i>MATH 8300: Introduction to Algebraic Geometry</i>	Fall 2024
<i>CSCI 2670: Theory of Computing</i>	Spring 2025
<i>CSCI 4370: Database Management</i>	Spring 2025
<i>MATH 8330: Hodge Theory</i>	Spring 2025
<i>MATH 8200: Algebraic Topology</i>	Spring 2025
<i>CSCI 4720: Computer Architecture</i>	Summer 2025
<i>CSCI 4760: Computer Networks</i>	Summer 2025