Aniruddha Nadiga

1/2 117 Dumbarton Road, G11 6PW, Glasgow, United Kingdom

(+44) 7308 137952 ⋄ asnadiga@gmail.com

EDUCATION

University of Glasgow *September 2019 - September 2020*
Master of Science in Mathematics Overall GPA: 21/22

Carleton College *September 2015 - June 2019*
Bachelor of Arts in Mathematics Overall GPA: 3.51/4

Budapest Semesters in Mathematics *Academic Year 2017-2018*
Fall & Spring Semester GPA: 3.71/4

STRENGTHS

Problem Solving
· **Course Work** - Practiced applying mathematical techniques to theoretical and real world problems.
· **LANL research** - Learned and developed cryptographic protocols, which required understanding a wide range of real world and theoretical issues.
· **Interdisciplinary Competition in Modeling** - Worked with a group to develop a metric to evaluate the health of city. Awarded Meritorious winner (top 10%).

Communications and Group Work
· **LANL Research** - Managed research projects and presented findings and progress various audiences.
· **Debate and Model United Nations** - Participated for over 8 years and have become a polished speaker. Ran both teams which involved organizing and working with large groups.
· **Tutoring** - Practiced communicating complex and abstract ideas in easy to understand ways.
· **Senior Thesis** - Worked in a group to conduct original mathematical research.

TECHNICAL SKILLS

Basics of Java, Python, SQL, R, Javascript, and HTML. Proficient in LaTeX, Mathematica.

WORK EXPERIENCE

Los Alamos National Laboratory *Summer 2018/19, Winter 2018*
Cryptography Research
Developed methods to extend the range of quantum key distribution using new developments in fully homomorphic encryption technology, and presented findings to a variety of audiences. In process of completing two papers: first is a write up of the described results, and second is an accessible introduction to the area of lattice-based cryptography.

Carleton College Mathematics Department *2018-2019*
Mathematics Tutor
12 hours per week of tutoring students in various mathematics courses.

Carleton College Mathematics Department *2018-2019*
Grader
Marked assignments for calculus courses in Fall and Winter terms.

Sunrise Education China *Summer 2017*
Adviser
Developed curriculum and taught at the Beijing National Debate Camp 2017.

ACADEMIC ACHIEVEMENTS

- Meritorious Winner (10th percentile) - Interdisciplinary Competition in Modeling, Winter 2017.
- 1st Place and Top Speaker Award - Minnesota State Debate Tournament, 2016 and 2019.
- 1st Place - International World Schools Debate Invitational, 2015.

PRESENTATIONS

- *On the Knotting Probability of Random Equilateral Hexagons.* Talk given with Clara Buck and Sean Gallagher, May 2019, at Carleton College.
- *Lattice Based Cryptography and Fully Homomorphic Encryption.* Talk at Northfield Undergraduate Mathematics Symposium, October 2018, at Carleton College.
- *Lattice Based Cryptography and Fully Homomorphic Encryption.* Poster presentation at Celebration of Excellence in Science Poster Session, October 2018, at Carleton College.

EXTRA-CURRICULAR

- Model United Nations 2015-2017; Member of Governing Board of 2017.
- Speech and Debate; 2015-2019; Club President 2017-2019.

MATHEMATICS/COMPUTER SCIENCE COURSES

Master's Courses

Further Group Theory - Geometric Group Theory	Topics in Algebra - Advanced Group Theory
Operator Algebras	Advanced Algebraic Topology
Advanced Functional Analysis	Lie Theory
Further Complex Analysis	

Undergraduate Courses

Mathematical Structures	Real Analysis
Topology	Real Analysis II
Algebraic Topology	Differential Equations
Differential Geometry	Elementary Theory of Numbers
Non-Euclidean Geometries	Applied Regression Analysis
Discrete and Convex Geometry	Probability Theory
Abstract Algebra	(Computer) Data Structures
Topics In Algebra - Representation Theory	Computer Organization and Architecture
Combinatorial Theory	Software and Development
Senior Thesis*	

On the knotting probability of random equilateral hexagons