ANIRUDDHA NADIGA

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

(+44) 7308 137952 ⋄ asnadiga (at) gmail (dot) com

EDUCATION

University of Glasgow   *September 2019 - September 2020*
Masters of Science in Mathematics

Carleton College   *September 2015 - June 2019*
Bachelors of Arts in Mathematics   Overall GPA: 3.5/4

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

RESEARCH EXPERIENCE

Los Alamos National Laboratory   Summer 2018 - Present
Undergraduate Research

Worked with Dr. Nathan Lemons to develop new cryptographic protocols using techniques from homomorphic (lattice-based) encryption schemes in novel ways. Generalized and simplified proofs of security and correctness for algorithms described in previous papers. 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.

Los Alamos National Laboratory   2013-2017
Undergraduate Research

Worked with Dr. Rangachary Mukundan to prototype and test high-temperature gas sensors for automotive and energy production applications. Worked though junior and senior years of high school, and over breaks through college.

ACADEMIC ACHIEVEMENTS

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

PRESENTATIONS

Lattice Based Cryptography and Fully Homomorphic Encryption. Talk at Northfield Undergraduate Mathematics Symposium and poster presentation at Celebration of Excellence in Science Poster Session, October 2018, at Carleton College.

MEMBERSHIPS

· American Statistical Association
· Mathematical Association of America
· American Mathematical Society

TECHNICAL STRENGTHS/SKILLS

Computer Languages	Java, Python, SQL, R, Javascript
Software & Tools	HTML, LaTeX, Mathematica
Communication	Developed through many mathematics presentations, Debate, and Model United Nations

WORK EXPERIENCE

Sunrise Education China   Summer 2017
Adviser

Developed curriculum for and taught at the Beijing National Debate Camp 2017, judged finals round of China National Debate Championship.

RELEVANT COURSES

Masters Courses

Further Group Theory	Topics in Algebra
Operator Algebras	Advanced Algebraic Topology (Winter Semester)
Differential Topology (Winter Semester)	Lie Theory (Winter Semester)
Further Complex Analysis (Winter Semester)	

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	Computer Organization and Architecture
Combinatorial Theory	Software and Development
Senior Thesis*	

*My senior thesis was on the knotting probability of random polygons.

EXTRA-CURRICULAR

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