

# Nurlan Gasimli

nurlan\_gasimli@student.uml.edu  
[ngasimli.github.io](https://ngasimli.github.io)

## RESEARCH INTERESTS

---

Algebraic and Differential Geometry, Hodge Theory, algebraic cycles, and their applications in Algebraic Geometry, Ricci Flow, Minimal Surfaces, and their applications in Differential Geometry.  
Algebraic and Analytic Number Theory, Riemann Hypothesis, Langlands Program, Arithmetic of Elliptic Curves, and Diophantine Geometry.

## EDUCATION

---

**University of Massachusetts Lowell**  
B.S. in Mathematics

Lowell, MA  
Expected May 2024

## AWARDS

---

**Competition Winner** 2020

- 2nd Place in the UMass Lowell Mathematics Competition as a freshman, competing against junior and senior students among the entire undergraduate cohort.

**International Scholarship** 2020

- Recognized with a \$12,500 annual scholarship for academic excellence

## EMPLOYMENT

---

**University of Massachusetts Lowell**  
Research Assistant

Lowell, MA  
Summer, 2021

- Collaborated on Ramsey Theory research under the guidance of Professor Daniel Glasscock.
- Focused particularly on quasi-arithmetic progressions and various aspects of integer Ramsey Theory.
- Explored topics such as topological dynamics and ergodic theory, with direct applications to Number Theory.

## PUBLICATIONS & PREPRINTS

---

*Ergodic Ramsey Theory: Piecewise Syndeticity Constant*

Nurlan Gasimli, Daniel Glasscock

[https://ngasimli.github.io/assets/ergodic\\_ramsey\\_theory.pdf](https://ngasimli.github.io/assets/ergodic_ramsey_theory.pdf)

## SKILLS

---

**Language** English, Azerbaijani, Turkish

**Programming** Python

## LEASURE INTEREST

---

Chess, Brain Ring Games