UTRGV

ALFRED P. SLOAN FOUNDATION

UTRGV MATH PATHWAYS

PAID SUMMER RESEARCH OPPORTUNITY

The University of Texas Rio Grande Valley

Do you want to participate in novel research in pure and applied mathematics?

Interested in graduate school, but unsure where to begin, or what it takes to succeed?

Curious about what you can contribute to industry with research experience?

The School of Mathematical and Statistical Sciences at the University of Texas Rio Grande Valley, with generous support from the Sloan Foundation, is excited to announce an opportunity for undergraduate students to participate in an 8 week research program.

In addition to opportunities to participate in research in topics in pure and applied mathematics, participants will participate in workshops aimed at preparing them to apply to, and excel in, graduate programs.

Participating Students will also travel to University of Texas Dallas and visit with industry leaders in science and technology fields in the Dallas-Forth Worth Area.

The program is open to all undergraduate students at UTRGV.

Program Highlights

- Program runs from June 2 to July 20
- 8 week research program
- $3,500 Stipend
- All cost paid trip to UT Dallas
- Workshops on Applying to Graduate School

Research Topics Include

- Numerical algorithms to solve systems of equations arising in wave scattering problems.
- Deriving solutions of the Korteweg-De Vries equation model of shallow water waves.
- Constructing solutions of the sine-Gordon equation with applications in physics.
- Toda Lattice models of crystals in solid state physics.
- Problems in graph theory colorings and their related polynomials.
- Investigations to Number Theory and Infinite sequences of number triangles.
- Problems in Optimal Quantization with applications to signal processing and data compression.

Application Materials Include

- Online Application Form
- Letter of Recommendation
- CV/resume
- Unofficial Transcript
- Application Deadline is April 10, 2022

For more information, contact Dr. Josef Sifuentes at josef.sifuentes@utrgv.edu