REU on Invasion Fronts in Complex Networks

May 24th through July 9th 2021

The Program

A seven week NSF sponsored research program for undergraduates. Up to four students will collaborate with Professor Matt Holzer on a research project related to front propagation on complex networks with epidemic spreading as a primary application.

Previous undergraduate project topics have included the study of locked invasion fronts (2020), estimating epidemic arrival times (2017), and pattern formation in the dynamics of opinions and consensus formation (2015) — see math.gmu.edu/~mholzer for project outcomes.

Ideal Candidates

Motivated undergraduate students who want to gain research experience. Applicants should have taken a course in differential equations. Advanced course work and experience with Matlab or similar computing language is a plus, but not required. Students must be US citizens or permanent residents.

Stipend

Students will receive a stipend of $4200 for the seven week program. Additional funds are available to cover travel costs to present research outcomes at a future conference.

Application

Please email a copy of your (unofficial) transcript and a short letter of interest to mholzer@gmu.edu. Arrange for one letter of recommendation from a faculty member to be sent to the same address. Deadline is April 9, 2021.

Please contact Professor Matt Holzer at mholzer@gmu.edu with questions.