# Faculty Profile

**Name:**              **Dr. SUNIL DAS**

**Designation:**       **Assistant Professor**

**Teaching Areas:**    Linear Algebra, Real Analysis, Complex Analysis, Discrete Mathematics, Differential Equations

**Research Interests:**   Sign pattern matrices

## Education:

- Ph.D., Indian Institute of Technology Guwahati, Assam, 2021
- M.Sc., Indian Institute of Technology Madras, Tamil Nadu, 2015
- B.Sc. (H), Tamralipta Mahavidyalaya, Vidyasagar University, West Bengal, 2012

## Research / Selected Publications:

1. **S. Das**, Sign patterns that allow algebraic positivity, Linear Algebra and its Applications 653 (2022) 151-182
2. **S. Das**, Sign patterns associated with some graphs that allow or require diagonalizability, Electronic Journal of Linear Algebra 38 (2022) 131-159
3. **S. Das**, Potentially stable and 5-by-5 spectrally arbitrary tree sign pattern matrices with all edges negative, Electronic Journal of Linear Algebra 37 (2021) 562-582
4. **S. Das** and S. Bandopadhyay, On some sign patterns of algebraically positive matrices, Linear Algebra and its Applications 562 (2019) 91-122