

# Sahir GILL

DATE OF BIRTH: 16 January 1997    PHONE: +91 9654003899    EMAIL: [sahirgill8@gmail.com](mailto:sahirgill8@gmail.com)

## EDUCATION

---

- 2019    B.E. (hons.) Electrical and Electronics Engineering  
**Birla Institute of Technology and Science Pilani**, K.K. Birla Goa Campus  
CGPA: 7.189/10, *first division*
- 2015    Senior School Examination  
**Central Board of Secondary Education**, India  
Subjects: Physics, Chemistry, Mathematics, English and Computer Science  
PERCENTAGE: 92.8%

## PUBLICATIONS

---

- 25<sup>th</sup> June 2018    **Bounds for Region Containing All Zeros of a Complex Polynomial**  
Journal Name: **International Journal of Mathematical Analysis** vol. 12, 2018, no. 7

## ACADEMIC PROJECTS

---

- Jan-Apr 2018    **COMPLEX ANALYSIS: Bounds for Region Containing All the Zeros of a Polynomial**  
Modeled new bounds for annular region containing all the zeros of a complex polynomial using existing number sequences which reduce the area of such regions formulated by already existing results for some polynomials. [Paper](#).
- Aug-Nov 2017    **COMPLEX ANALYSIS: A General Approach to Prove the Sendov Conjecture**  
Formulated an approach using Mathematica for proving the conjecture using the apolarity condition of polynomials. Presented a condition on fourth degree (can be extended generally) polynomials which if has a solution under given constraints, proves the conjecture. [Report](#).

## WORK EXPERIENCE

---

- |              |  |
|--------------|--|
| MAY-JUL 2017 | Summer Intern at ADANI POWER, <i>Mundra</i><br>Industrial Training for Transformer Overhauling and Maintenance at India's second largest power plant. Rated " <i>good</i> " for performance and conduct. |
|--------------|--|

## POSITION OF RESPONSIBILITY

---

- |                  |  |
|------------------|--|
| AUG 2018-CURRENT | Teacher's Assistant MULTIVARIABLE CALCULUS, <i>On Campus</i><br>Evaluation of quizzes, assistance during tutorial sessions, consolidation of scores, exam invigilation duties and organizational assistance to the instructor.   |
| JAN-MAY 2018     | Teacher's Assistant LINEAR ALGEBRA & COMPLEX ANALYSIS, <i>On Campus</i><br>Facilitated doubt clearing sessions, consolidation of scores, exam invigilation duties and organizational assistance to all students. Rated " <i>excellent</i> " for overall performance.   |
| AUG-DEC 2017     | Teacher's Assistant CALCULUS, <i>Off Campus</i><br><i>Work Integrated Learning Program</i><br>Critical evaluation of answer sheets with constructive feedback. Moderation of discussion forum and answering queries of working professionals undertaking the course. Rated " <i>excellent</i> " for overall performance. |
| AUG '16-MAY '17  | Editor at SIZZLING SANDS, <i>BITS Goa Annual Magazine</i><br>Directed content contribution and editing of creative submissions by college community. Moderated and promoted the magazine content on social media.  |

## CERTIFICATES AND EXAMINATIONS

---

JUNE 2018 TOEFL iBT<sup>®</sup>: 114/120 (R:27/30;L:30/30;S:29/30;W:28/30)  
MARCH 2018 GRE<sup>®</sup>: 324/340 (Q:170/170;V:154/170); AWA: 4.0/6.0

## COMPUTER SKILLS

---

Basic Knowledge: MATLAB, HTML,  $\text{\LaTeX}$   
Intermediate Knowledge: C++, Wolfram Mathematica

## MATHEMATICS COURSEWORK

---

Multivariable Calculus, Probability & Statistics, Linear Algebra & Complex Analysis, Differential Equations, Number Theory, Complex Analysis, Introduction to Topology, Optimization, Study Project, Mathematical Methods, Design Project 1, Algebra-I, Elementary Real Analysis, Design Project 2.

Poetry Blog ([link](#)), Football, Astrophotography, Reading.