

Shourya Bose

☎ (+91) 9673-150-855 | ✉ f20140692@goa.bits-pilani.ac.in, boseshourya1@gmail.com | 📱 shourya01 | 🌐 shourya-bose-8b283010a

Education

BITS Pilani, KK Birla Goa Campus

B.E. (HONS.) IN ELECTRICAL & ELECTRONICS ENGINEERING

- Part of integrated Dual Degree program. Expected graduation in December 2019.

Goa, India

Aug 2014 - PRESENT

BITS Pilani, KK Birla Goa Campus

M.Sc. (HONS.) IN MATHEMATICS

- Part of integrated Dual Degree program. Expected graduation in December 2019.

Goa, India

Aug 2014 - PRESENT

Skills

Academic Topics

Linear Algebra, Probability Theory, Numerical Methods, Control Theory

Programming Languages

C/C++, MATLAB, Python, LaTeX

Application Specific Software

NASA DAS, NASA GMAT, AGI STK

Standardized Examinations

GRE (Verbal 159/170, Quant 160/170, AWA 4.5/6), IELTS TOEFL (106/120)

Spoken Languages

English, Hindi, Bengali (spoken), French (basic)

Experience

Department of Electrical Engineering, Indian Institute of Science

RESEARCH INTERN

- Working under the guidance of Dr. Pavankumar Tallapragada.
- Researched and published a conference paper on event-triggered stochastic control in the Fifth Indian Control Congerence.
Link: <https://ieeexplore.ieee.org/document/8715576/>
- Working on extending aforementioned paper to factor in Decision-based Markov Channels.

Bengaluru, India

Jan. 2019 - Present

Pixxel Space

RESEARCH INTERN

- Learned use of NASA DAS software and was part of the group with wrote ODAR (Orbital Debris Assessment Report) to FCC to enable launch of company's first smallsat.
- Used NASA GMAT and AGI STK softwares for modeling of orbital behaviour of satellite.

Bengaluru, India

Aug 2019 - Present

Department of Electrical Engineering, Indian Institute of Science

RESEARCH INTERN

- Worked under the guidance of Dr. Pavankumar Tallapragada.
- Explored search algorithm for autonomous multi-agent systems, for example, a swarm of drones.

Bengaluru, India

Jun. 2017 - Jul 2017, Nov 2017 - Dec 2017

Department of Mathematics, BITS Pilani, Goa Campus

MEMBER OF DESIGN PROJECT GROUP

- Implemented a matrix based method to numerically solve fractional-order differential equations using Haar Wavelets.
- Research work as part of the team led to publication of this work in International Journal of Chemical Reactor Engineering (IJCRE).
Link: <https://www.degruyter.com/view/j/ijcre.2017.15.issue-5/ijcre-2017-0093/ijcre-2017-0093.xml>

Goa, India

Jan 2017 - May 2017

HMT Tractors, Pinjore

SUMMER INTERNSHIP

- Performed an energy audit to determine energy-saving measures for the company's ageing shop floor.
- Presented audit plan to Operations Manager for company's shop floor operations.

Pinjore, India

May 2016 - Jul 2016

Project Vriddhi

MEMBER

- Project Vriddhi was envisioned as a student-based initiative to attempt to solve congestion problems in slums.
- We proposed a model of urban decongestion through transportation availability, which our group of 4 students dry ran in the slum of Zari, Goa. I was responsible for photography and record-keeping.
- Our team won the Regional Finals of Hult Prize 2015, and we presented our ideas in the Hult Prize Global Finals held in Dubai.

Goa, India

Jan 2016 - Sep 2016

Extracurricular Activity

BITS Pilani Goa Debating Team

Goa, India

PARLIAMENTARY DEBATING

Nov. 2011 - PRESENT

- Attended 8+ parliamentary debates in various colleges.
- Debating formats include British Parliamentary Debating and Asian Parliamentary Debating.
- Trained junior debaters for future debates.

Mathematics Association, BITS Pilani Goa

Goa, India

SECRETARY

Dec 2015 - May 2016

- Streamlined course related communications between students and faculty of Mathematics at BITS Pilani, KK Birla Goa Campus.
- Helped in organizing MathFest, the annual mathematics related festival organized by Department of Mathematics, BITS Pilani KK Birla Goa Campus.

Honors & Awards

INTERNATIONAL

2016 **Finalist**, Hult Prize Global Finals

Dubai, U.A.E

DOMESTIC

2017 **Winner**, MATLAB Hackathon, Waves 2017

Goa, India

2017 **Winner**, Best Social Entrepreneurship Idea, Waves 2017

Goa, India

2016 **Winner**, Hult Prize 2016 Goa Regional Finals

Goa, India

2013 **Qualified**, Regional Mathematics Olympiad (RMO)

Faridabad, India

2011 **Winner**, Faridabad Quiz Competition, organized by Dainik Bhaskar

Faridabad, India