

Julián Andrés Gil Santos

"I have not failed. I have just found 10,000 ways that won't work." - Thomas Edison

Application

2016 Young Ambassador Program, DAAD.

Personal Information

D.O.B. 26-09-1993

Gender Male

Nationality Indian

Education

- 2012–present **5 year integrated BS-MS in Physics(5th year)**, Indian Institute of Science Education and Research, Kolkata, GPA 8.96.
 - 2012 **Higher Secondary Examination(CBSE)**, Bhavan's Gangabux Kanoria Vidyamandir, Kolkata, *GPA 9.1*.
 - 2010 **Secondary Examination(Madhyamik)**, *Ramakrishna Mission Vidyalaya*, Narendrapur, *GPA 8.9*.

Awards

- 2012 KVPY Scholarship from Indian Institute of Science, Bangalore
- 2014 NIUS Fellowship from Homi Bhaba Centre for Science Education, Mumbai
- 2015 Charpak Research Internship Scholarship from Campus France
- 2015 Optics and Photonics Education Scholarship from SPIE
- 2016 **DAAD-WISE Scholarship** from DAAD

Research Experience

Sponsored Projects

2016 **DAAD-WISE Program**, supervised by Dr. Sebastian Hofferberth, University of Stuttgart.

A STUDY ON STRONG INTERACTIONS IN RYDBERG ATOMS USING ELECTROMAGNETICALLY INDUCED TRANSPARENCY (EIT)

2015 **Charpak Research Internship Program**, *supervised by Dr. Fabien Bretenaker and Dr. Fabienne Goldfarb*, Laboratoire Aime Cotton, Paris.

THE TORTOISE AND THE LIGHT

2014 **NIUS Program**, *supervised by Dr. Paresh K. Joshi and Dr. Rudrajyoti Palit*, Tata Institute of Fundamental Research, Mumbai.

SIMULATING A CO-AXIAL HIGH PURITY GERMANIUM (HPGE) DETECTOR

2013 **IISER Kolkata Summer Internship Program**, supervised by Dr. Supratim Sengupta, IISER Kolkata.

Exploring the quasi-species equation and the evolutionary dynamics of a population containing RNA-like molecules

Term Projects

2016 Course:Advanced Experimental Physics lab, supervised by Dr. Ayan Banerjee, IISER Kolkata.

MIE SCATTERING OF AN ARBITRARY BEAM BY A SPHERE

- 2016 **Course:Research Methodology**, supervised by Dr. Rajesh K. Nayak, IISER Kolkata. Shall we trust the small angle approximation?
- 2015 **Course:Condensed Matter lab**, supervised by Dr. Bhavtosh Bansal, IISER Kolkata. An approach to quantify collective dynamics in active matter using image processing in MATL
- 2015 **Course:Nuclear Physics lab**, *supervised by Dr. Bipul Pal*, IISER Kolkata.

 A NOVEL APPROACH FOR LOCATING A GAMMA RAY SOURCE USING COMPTON SCATTERING
- 2013 Course:Basic Electricity and Magnetism, supervised by Dr. Dibyendu Nandi, IISER Kolkata

A SPEAKER WITHOUT ELECTROMAGNET!

Other Projects

2014 **Summer Internship**, *supervised by Dr. Bichitra Nandi Ganguly*, Saha Institute of Nuclear Physics, Kolkata.

Synthesis and study of bio-conjugated GaO(OH) nanoparticles, a potential candidate for cancer diagnosis using Positron Emission Tomography (PET)

2013 **Summer Internship**, supervised by Dr. Bipul Pal, IISER Kolkata.

THE ANALYSIS OF TRANSIENT MOTION IN A FORCED OSCILLATOR USING A MOTION TRACKER SOFTWARE

Research Visits

2015 **SPIE Optics and Photonics Education Scholarship**, *invited by Dr. Sile Nic Chormaic*, Okinawa Institute of Science and Technology.

Technical Skills

Programming Python, Fortran, C++

Languages

Technical MATLAB, LabView, Gnuplot, Origin, Mathematica, LATEX

Softwares

Basic Utilities Microsoft Office, Adobe Photoshop

Operating Linux, windows

Systems

Communication Skills

2013 Poster presentation competition at Inquivesta 2013

2nd position

Lingual Skills

English Advanced Conversationally fluent (medium of education)

Bengali Advanced Conversationally fluent (mother tongue)

Hindi Intermediate Conversationally fluent

German Basic (Start auf Deutsch A1)

Basic words and phrases only

Interests

- Football

- Indian Flute (Bansuri)

- Photography

- Literature

References

1. Dr. Nirmalya Ghosh, Associate Professor, IISER Kolkata.

email: nghosh@iiserkol.ac.in

2. Dr. Asok Kumar Nanda, Professor, IISER Kolkata.

email: asok@iiserkol.ac.in