

# Julián Andrés Gil Santos

"What you think; you become. What you feel; you attract. What you imagine; you create." - BUDDHA

## 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(5<sup>th</sup> 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