**SERGIO DANIEL HERNANDEZ CHARPAK**

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# Education

**Universidad de los Andes** Bogotá**, Colombia**

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| **Physics**, Bachelor of Science | *Expected graduation, September 2016*  GPA **4.25**/5.00 |
| **Computing Engineering**, Bachelor of Engineering  **Japanese Language and Culture,** Minor | *Expected graduation, April 2017*  GPA **4.25**/5.00 |

**Tokyo University of Marine Science and Technology** Tokyo**, Japan**

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| **Visiting Student**  Control and Robotics Laboratory | *May 2014-June 2014* |

**Kyoto Institute of Culture and Language** Kyoto**, Japan**

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| **Intermediate Japanese Student** | *October 2013-March 2014* |

[**Lycée Français**](http://www.lyceechicago.org/)**Louis Pasteur** Bogotá, **Colombia**

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| **Student** | *Graduated, July 2009*  *Scientific Bachalauréat, Mention Bien* |

# Research Experience

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| ***Universidad de los Andes***  *Department of Computing Engineering*  Bogotá, Colombia  *August - December 2015* | **Undergraduate Research Assistant**  Developed Python tools for testing prototypes in the project Astronomical Image processing from large all-sky photometric surveys for the detection and measurements of transients under the mentorship of prof. Marcela Hernandez. |
| ***Fermi National Laboratory***  *Neutrino Division*  Batavia, U.S.A.  *June –July – August 2015* | **IPM Intern – Muon G-2 Experiment**  Part of the team for the Test Beam of a Straw Detector Prototype in charge of the High Voltage and assisted with the analysis of the data taken under the mentorship of scientist Brendan C Casey. |
| ***Tokyo University of Marine Science and Technology***  Tokyo, Japan  *May -June 2014* | **Visiting Student - Control and Robotics Laboratory**  Assisted with the integration and control of a helicopter with Arduino under the supervision of professors Sho and Ito. |

# Teaching Experience

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| ***Universidad de los Andes***  Bogotá, Colombia  *2011,2012,2013,2014,2015* | **Undergraduate Teaching Assistant**  Undergraduate Teaching Assistant for sections of Object Oriented Programming 1, Data Structures, Modeling, Simulation and Optimization, and Computational Methods courses. |
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**Additional Work Experience**

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| ***Mariño Math***  Bogotá, Colombia  Sept 2011-Present | **Tutor**  High School Physics, Chemistry, Math and Biology Tutoring in both French and Spanish. |
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**Skills**

**Software and programming**

-Java, Python, IPython, C, MATLAB, Processing, Arduino, Assembler, UML, Git, PHP.

-Familiar with Linux, Windows and MAC OS.

-Github: https://github.com/sercharpak

**Techniques**

-Familiar with group work techniques: TSP.

-Basic electronic circuits skills (design and fabrication of prototypes).

**Languages**

-French (fluent) -English (fluent)

-Spanish (fluent) -Japanese (Upper Intermediate, JLPT level 2)