***Jordan Alexis Caraballo Vega***

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**Objective**

Enroll in a Graduate program to acquire new knowledge and enrich my professional path. Computational STEM areas are my main interest, taking into account the desire of mixing disciplines to improve life styles.

**Education:**

Junior – Bachelor’s Degree Computational Mathematics / Computer Science, Graduation Date: 05/2019

University of Puerto Rico at Humacao, PR

GPA: 3.90, Credits Earned: 52 Semester Hours

**Research Projects:**

- 02/17-Pres., ***Trainee/Intern Web-based Software Reviewer***, ADNET and NCCS-GSFC

- 06/16-Pres., ***Molecular Dynamics Simulations of pABA Functionalized Cellulose Nanocrystals***, PREM

- 06/17-08/17, ***Machine Learning Techniques for Security Information and Event Management***, NCCS-GSFC

- 08/16-12/16, ***Building Cost Effective High Performance 100 Gbps Firewalls***, NCCS-GSFC

- 06/16-08/16, ***An Automated SCAP Security Tool***, NCCS-GSFC

- 09/14-05/15, ***Analysis of trends in scientific public publications using Data Mining***, PREM

- 09/13-05/15, ***Molecular Dynamics Simulation of Electrodes for Capacitors made with Nano-onions***, PREM

- 06/14-07/14, ***Implementation of New Methods to Decrease Wolffia's Algorithms Time and Calculations***, PREM

- 01/14-05/14, ***Computer Simulation Treatment to combat one of the most common cellphone bacteria***

***(Staphylococcus Aureus)***, CCCE

- 06/13-07/13, ***Technical & Economical Evaluation of biodiesel mixtures in a two stroke engine***, CCCE

- 01/13-05/13, ***Prevention of Bacteria (Staphylococcus Aureus) in Cell Phone***, CCCE

- 08/12-12/12, ***Breathing by a reversible fuel cell***, CCE

*\*\*NASA Center for Climate Simulation, Goddard Space Flight Center (NCCS-GSFC)\*\**

*\*\*Partnership for Research and Education in Materials, University of Puerto Rico at Humacao (PREM)\*\**

*\*\*Caribbean Computing Center for Excellence (CCE)\*\**

**Internships:**

- 06/17-08/17, **Summer Internship at Goddard Space Flight Center**, MD, USA

- 08/16-12/16, **Fall Internship at Goddard Space Flight Center**, MD, USA

- 06/16-08/16, **Summer Internship at Goddard Space Flight Center**, MD, USA

- 07/14-08/14, **NSF-Pennsylvania Summer Science Initiative**, University of Pennsylvania, Pennsylvania, USA

- 06/13-07/13, **CCE Summer Internship at University of Puerto Rico at Humacao**, PR

**Publications:**

- Caraballo-Vega, J. (2016) *Building Cost Effective High Performance 100 Gbps Firewall*, Published Demo.

- JAC, Mir., F. M. (2014). *Molecular dynamics simulation of electrodes for capacitors made with nano-onions*, NCUR.

**Professional Information:**

**Language Skills:** Advanced Spanish, Advanced English

**Programming Languages:** Python, Perl, Bash, C++, GELF, HTML

**Methods:** Molecular Dynamics Simulations, Data Mining, Web-based Software Review, Security Assessments,

HPC Hardware Tuning, Network Testing, Log Analysis, Networking, Web Apps

**Operating Systems:** Linux, Unix, Windows, OSX, FreeBSD

**Extracurricular Activities and Associations:**

- **Volunteer Nanodays**, since 2014 (PREM small workshops to teach about material science)

- **Volunteer Nano Casa Roig Museum,** (PREM exhibition for nano science outreach**)**

- **ASMACC** **Member** (Association of Mathematics and Computer Science)

- **NSHSS** **Member** (National Society of High School and College Scholars)

- **AFE Member** (Association of Students of Physics and Electronics)

**Awards and Recognitions:**

07/28/17 John Mather Scholarship Awardee

05/17/16 Recognition Medal by Humacao's Mayor at the Young Stars Night at Humacao

05/12/16 PR Senate Medal in recognition for Research and MUREP Scholarship recipient

10/15/15 Proclamation by Yabucoa's Mayor in recognition for promising student candidate

06/26/15 NASA MUREP Scholarship

05/26/15 University of El Turabo recognition for Best Values and Academic Achievement

05/26/15 Brystol Myers Squib Industry Excellence in Science and Math Scholarship

05/26/15 One-off Excellence Student and Petra Mercado Student High School Award

05/26/15 Highest College Board of the School Award

05/26/15 Academic Excellence Awards in Math, Science, English, Spanish, and History

03/12/15 First Place at District Math Olympics

03/10/15 Intel Special Prize at Regional Science fair

03/10/15 First Place Regional Science fair in “Systems Software”

02/23/15 First Place District Science fair in “Systems Software”

12/01/14 Honorific Mention (4th place) in the poster competition

05/24/14 Poster Investigation “Best Poster Award” Pre-college Research Symposium

02/13/14 First Place District Science fair in “Computer Science”

03/14/14 Third Place at District Mathematics Olympians

05/17/13 Responsibility Student Award

05/11/13 Poster Investigation “Best Poster Award” Pre-college Research Symposium

04/19/13 Innovation Student’s Award

04/15/13 Second Place at District Mathematics Olympians

04/14/13 First Place Oratory Competition

08/12/13 PREM High School Research Scholarship