Meet a USCMS Student

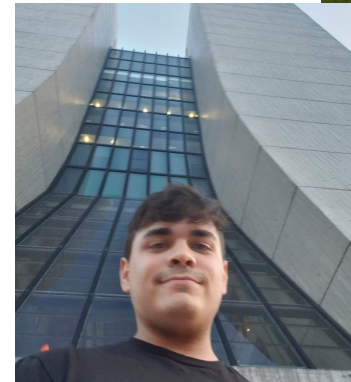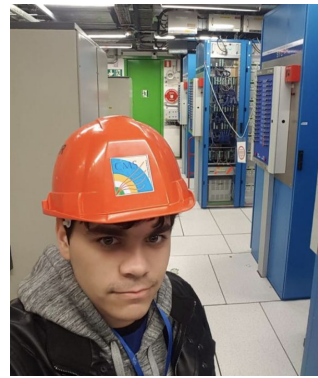The life of Guillermo Fidalgo Rodríguez
(so far)

Who am I?

- Born and raised in San Juan, Puerto Rico
- 26 years old
- Speak English and Spanish.
- My hobbies include video games, Netflix, Basketball, Volleyball and play billiards…
- Favorite Marvel character is Deadpool
- Favorite DC character is Batman
- Love chocolate!
- Major in Physics and a Minor in applied Maths from University of Puerto Rico at Mayagüez.
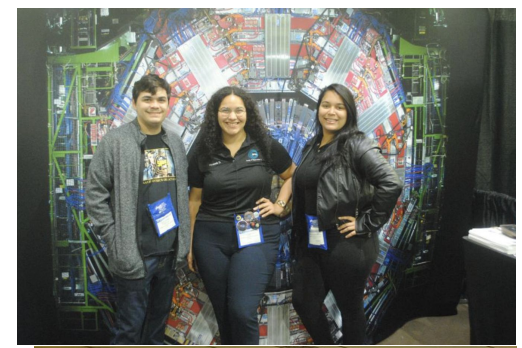- Currently finishing my Masters in Physics

Academic Life

- I started undergrad in 2014
- Joined the SPS UPRM Chapter and led many physics demo outreach events.
- Met Prof. Malik in 2015 and joined his research group in 2016.
- Learned the basics of ROOT, Unix and Git
- 2018
  - Went to CERN as part of the UM Semester at CERN Program
  - Learned about Machine Learning and Data Quality Monitoring
  - Visits to Fermilab, presented at New Perspectives Conferences
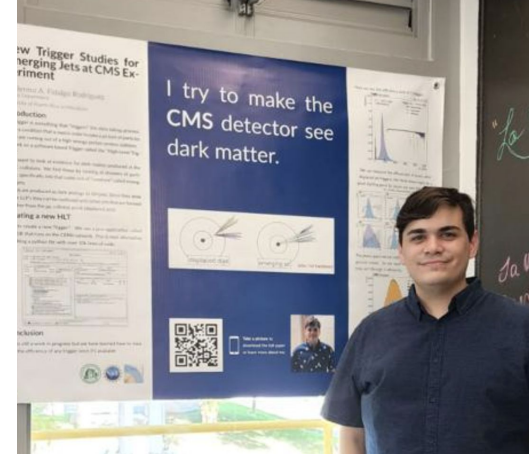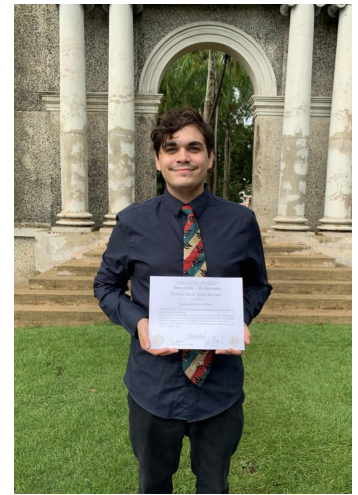 - Collaborate with Fermilab scientists on ML projects.

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Academic Life (cont.)

- In 2019
  - I participated in Physcon. (2nd conference)
  - Hackathon at UPRM led by Prof. Sergei Gleyzer
  - I started participating in more physics outreach activities
  - Python Workshops for Teachers, Students and Physics demonstrations for general public.
  - I started a student association called the Scientific Software Club (SSC) dedicated to software workshops and teaching to other university students
  - Presented at my 3rd conference called JTM/PRISM in UPRM.

Academic Life (cont.)

- 2020 - Now
  - More workshops for STEM Teachers and students
  - Graduated and got accepted into Masters.
  - Joined an Exotic Physics Analysis group (EMJ)
    - University of Maryland
    - UPRM
    - C.U. Boulder
  - Colorado Pathways Program
    - Trigger Studies for EMJ
  - DPF Conference (online) (4th conference)
  - 5th conference at PRISM-LSAMP Conference Poster Session at Humacao, PR
  - Mentor at HSF / IRIS-HEP training events (matplotlib,ML…)

Research (What do I do in CMS?)

- Lots and lots of coding and teaching
- Emerging Jets Analysis
- Machine Learning for Tracker DQM studies
- IRIS-HEP/ HSF Training Group
- Offline Tracker DQM Shifter
- Basically whatever Sudhir needs me to do.

Graphical representation of me.

How did I start out?

- CMSDAS
- Constant help from Scarlet Norberg (postdoc)
- Gabriele Benelli (Brown Scientist based at FNAL)
- General CERN experience

Future Plans

- Get a PhD in either Particle Physics or Data Science
- Depending on this past point I would like to continue my research work mainly focused on developing Machine Learning techniques for HEP or go into industry job.
- Give back to my community from a position of influence.

Ways to connect and contribute

- Make your own website and get noticed!
- Join the CERN Alumni
- Help HEP group organise things locally ML Hackathon, CTEQ school

Thanks!

HEP is very unique, you get to meet people from all countries, languages etc.

Diverse and international community :)