

# Gabriel S Santiago-Guzmán

gabriel.santiago16@upr.edu • 939-259-2055

<http://gsantiago.me> • <https://linkedin.com/in/agsant01> • <https://github.com/agsant01>



## Education

### University of Puerto Rico – Mayagüez Campus

*Bachelor of Science in Computer Engineering*

**Expected Graduation Date: May 2022**

**GPA: 3.40**

*Relevant Coursework: Fundamentals of Computer Science, Data Structures, Electric Sys. Analysis I, Currently: Logic Circuits, Software Engineering*

### Technical Skills

- ❖ Unix/Linux (3yrs)
- ❖ Java (4yrs), Python(4yrs), SQL(2yrs), Typescript(2yrs), HTML(2yrs), JavaScript(~1yr)
- ❖ JavaFX(1yr), Flask(1yr), SQL Server(1yr), MySQL(1yr), Angular(2yrs), IIS
- ❖ GitHub(4yrs), Android Studio, Firebase Ecosystem

## Experience

### The MITRE Corporation – Internship

**Summer 2019**

*Engineering Intern (Non-disclosure Agreement)*

- Completed theoretical research for alternative applications of the HTTP/s network communication protocol
- Learned about Docker for the deployment of scalable applications fast and effectively
- Enrolled in a 2-day course of Quantum Software Development using Q# to learn about the near-term challenges this new technology poses for today's encryption techniques

### General Electric Company – Coop Experience

**Fall 2018 – Spring 2019**

*Engineering Intern (Part-time for 1 semester after the completion of the COOP term)*

- Created applications for the manufacturing line in JAVA to track performance indicators and orders status.
- Automated manual processes using applications and data provided by the manufacturing line databases reducing by 80% the time of creating reports of different manufacturing metrics.
- Developed a platform to track inventory, list product number, and update the components of different products in JAVA and MYSQL to have more trackability of parts sent to the line and reduce training times.
- Created a manufacturing planner algorithm by collecting historical data from Test Stations to predict the testing time per product configuration, maximizing production output by minimizing the cost function of the testing rigs.
- Developed a plan to automate processes and integrate the inventory and manufacturing planner systems to automate 30% of the tasks required for the operation of the production line.

### MCS Healthcare Holdings, LLC - Coop Experience

**Spring 2018 - Summer 2018**

*Programmer Analyst –Intern*

- Created a password recovery application using Angular and Flask for corporate applications reducing the time of password reset by a 90%.
- Created a system to monitor, create reports, automate notifications, and store changes made to accounts of internal applications using Angular and Flask to automate application certification process and reduce manual tasks in a 50%.

### Center for Educational Informatics – North Carolina State University

**Summer 2017**

*Undergraduate Research Student*

- Experimented with different Kernels to improve efficiency and accuracy of a clustering model to predict PASS's or FAILS of students in a math course.

## Projects

### Arecibo Observatory Radio Telescope - Undergraduate Research

**Spring 2019 – Present**

*Undergraduate Research Student*

### Industrial Affiliates Program - Undergraduate Research UPRM

**Fall 2016 - Spring 2018**

*Lead Android Developer*

- Created an Android application for voting, registration, and profile creation for students, advisors and recruiters attending the annual IAP conference using JAVA and Firebase Realtime Database for faster vote counting and provide the attendees to have access to profiles of the students, advisors, and projects.

### GitHub® (Personal)

- **Java-db-toolkit:** A JAVA database connection handler, ORM, DB table creator, and model parser.
- **PyLogger:** A logger for Python3.6+. Logs to console, file (TEXT or JSON format), and/or databases.

## Leadership & Community

**Peer Lead Team Learning - Leader and Mentor**

**Spring 2019 - Present**

**CAHSI (Computing Alliance for Hispanics Serving Institutions) - Board Secretary**

**Fall 2019 - Present**