Diego Rivera Correa

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Khoury College of Computer Sciences
Northeastern University
Boston, MA

Research Interests

Databases, Visualization, Statistical Methods, Data Mining, Cryptography

Education

9.2023 – Present **Northeastern University** – Boston, MA
PhD in Computer Science
Mentor: Professor Mirek Riedewald.
Khoury Distinguished Fellowship

8.2019 – 5.2023 **University of Puerto Rico - Mayagüez (UPRM)** – Mayagüez, PR
BS in Computer Science
Focus areas: Data Science, Cryptography *GPA: 3.85.*

Industry Experience

6.2023 – 8.2023 **Software Engineer, Nagnoi** – San Juan, PR

5.2022 – 8.2022 **Business Intelligence Engineer, Amazon** – Nashville, TN

6.2021 – 8.2021 **Data Engineer & App Developer, AIG** – San Juan, PR

1.2021 – 5.2021 **Data Scientist, Andeno** – San Juan, PR

Research Experience

10.2022 – 1.2023 **Constructing 2D Watermarks by Composition**
Mentor: Dr. Alcibiades Bustillo (UPRM)
- Researched finite field theory to create 2D sequences to represent watermarks.
- Used Python to generate robust polynomials, develop auto and cross correlation functions, and k-means cluster analysis to determine ideal watermark insertion, detection, and extraction features.
- Created Python scripts to prepare M, Hall, and Legendre sequences using primitive roots and convert them into images using Matplotlib.

Honors and scholarships

2023 Khoury Distinguished Fellowship, Northeastern University

2023 Honor Roll, UPRM Math Department, UPRM

2022 CAHSI Local REU Research Fellow, UPRM

2022 FOCUS Scholar, Georgia Institute of Technology

2022 Nagnoi Scholar, Nagnoi

2022 Honor Roll, UPRM Math Department, UPRM

2021 FOCUS Scholar, Georgia Institute of Technology

Publication

2020 **"NASA Revolutionary Aerospace Systems Concepts Academic Linkage (RASC-AL) Design Competition First Place Winning Paper - University of Puerto Rico, Mayagüez"**
co-authored.
Aerospace Research Central.

Talks

2.2023 **Constructing 2D Watermarks by Composition**
SIDIM XXXVIII, Symposium Poster Session, Mayagüez, PR

Technical Skills

Programming Languages
C++, Python, Java, Scheme

Data Visualization
R, PowerBI, Excel, Matplotlib, Seaborn, QuickSight

Databases
MySQL, SQL, AWS-Redshift, PostgreSQL, PHPMyAdmin

Software
LaTeX, Git

Languages
English (fluent), Spanish (native)