#### Coordonnées

www.linkedin.com/in/mreveil (LinkedIn)

#### Principales compétences

Machine Learning

Python (Programming Language)

Research

#### Languages

English (Full Professional)

French (Native or Bilingual)

Spanish (Limited Working)

Haitian Creole (Native or Bilingual)

#### Certifications

MTA: Security Fundamentals

Deep Learning Specialization

Microsoft Office Specialist

MTA: Software Development

Fundamentals (C#)

MTA: Database Administration

**Fundamentals** 

#### Honors-Awards

First Year Graduate Student of the Year

Intel Scholar

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Colman Fellow

**GEM Fellow** 

Austin Hooey Graduate Research Excellence Award

#### **Publications**

Classification of spatially resolved molecular fingerprints for machine learning applications and development of a codebase for their implementation.

# Mardochée Réveil, PhD

Materials Informatics Program Manager | Computational Materials Science | AI/ML for Materials Discovery

Ithaca, New York, États-Unis

### Résumé

To remain competitive, companies must successfully combine their employees' expertise with artificial intelligence and innovate faster than ever.

My primary interest is to help achieve this vision within R&D organizations.

My journey so far has allowed me to contribute to this both on a technical level as an individual contributor and now as a technical program manager.

As an individual contributor, I have developed algorithms for highthroughout computation, designed physics-inspired neural network architectures, and created new Al-based prescriptive modeling tools to design materials and devices faster.

In my current role, I lead a multidisciplinary team of product owners, software engineers, UI/UX designers, and scientists to build and deliver Corning's materials informatics roadmap using agile practices and FAIR data principles.

My top strengths as identified by my colleagues are my ability to think strategically to balance short-term priorities with long-term viability, bring people together under a common vision, and break down ambitious goals and challenging problems into solvable pieces.

My specialties are algorithm development, machine learning, molecular simulations and agent-based modeling.

I'm also passionate about giving back in meaningful ways. I volunteer in several efforts including the creation of a national

robotics competition in Haiti as well as various mentoring and hiring activities targeting people from underrepresented backgrounds.

Reach out to chat about AI for science, technical program management, innovation and giving back in meaningful ways.

## Expérience

Corning Incorporated 6 ans 4 mois Research Associate août 2022 - Present (9 mois)

Materials Informatics Program Manager octobre 2021 - Present (1 an 7 mois)

Senior Research Scientist mars 2020 - octobre 2021 (1 an 8 mois)

Research Scientist janvier 2017 - mars 2020 (3 ans 3 mois) Corning, New York

Corning Incorporated Research Scientist Intern mai 2016 - septembre 2016 (5 mois)

Intel Corporation
I&C Engineer Intern
juin 2014 - août 2014 (3 mois)

While performing my duties as an instrumentation and controls engineer intern, I supported the optimization of field instruments management system leading to better technology transfer for design and construction of new factories. I also created and implemented an algorithm for control of complex closed-loop water systems. This algorithm allows for an estimated 50% water savings, increased efficiency and factory up-time. Lastly, I initiated the implementation of a utility management system that will enable better utility usage monitoring from a building/factory level all the way to individual piece of equipment level allowing for increased operational efficiency.

Intel Corporation
Graduate Facilities Engineer Intern
juin 2013 - août 2013 (3 mois)

As one of the wastes treatment systems was reaching maximum capacity and additional investment were being considered, I created and validated a model that helped optimize the operation of exhaust scrubbers allowing for up to \$2.4M costs avoidance and 50% wastestream reduction. I also performed an audit and made recommendations for better operation of closed-loop process cooling water systems leading to increased efficiency and better understanding of system chemistry.

Pure Water for the World Water Quality Technician septembre 2010 - juin 2011 (10 mois)

In this capacity, I was responsible for quality control and assurance of all field water treatment systems installed throughout the country. Water was tested for microbiological, physical and chemical quality indicators, root causes of deviations were determined and recommendations made to prevent problems from happening again. I also supported engineers from Dow Chemicals in the commissioning of two (2) modern water treatment plants using Reverse Osmosis and Nano-filtration technologies along with Programmable Logic Controller (PLC). I took ownership of commissioned systems, trained technicians for daily operation and handled troubleshooting.

## Formation

Cornell University

Doctor of Philosophy (Ph.D.), Chemical Engineering · (2014 - 2018)

Syracuse University

Master's degree, Chemical Engineering (2012 - 2014)

Université d'Etat d'Haïti

Bachelor, Chemistry · (2007 - 2010)