

Michelle D. Davies

<https://www.michelledominiquedavies.info/>

Education

Cornell University, College of Engineering, Ithaca, NY – Bachelor of Science, 2022

Major: Electrical and Computer Engineering (ECE)

Concentrations: Intelligent Systems & Data Science/Machine Learning

John McMullen Dean's Scholar, Robert L. Ryan Scholar

Technical Experience

Associate Data Scientist, [IBM](#); Cambridge, MA – September 2022- Present

- Incorporating a variety of statistical and machine learning techniques in projects for clients in the Public Sector. Writing programs to cleanse and integrate data in an efficient and reusable manner using leading-edge and open-source tools such as Python, R, and TensorFlow, combined with IBM tools and our AI application suites.
- Working in an Agile, collaborative environment, partnering with other scientists, engineers, consultants, and database administrators of all backgrounds and disciplines to bring analytical rigor and statistical methods to the challenges of predicting behaviors.
- Communicating with internal and external clients to understand and define business needs and appropriate modeling techniques to provide analytical solutions.
- Evaluating modeling results and communicate the results to audiences.

Client-Facing Technical Support CO-OP, [IBM](#); Littleton, MA – May 2021- December 2021

- InfoSphere Information Server (“IIS”) - Built into a wide variety of customer systems from various industries : Aviation, Automotive, Finance, Government, Health, Non-Profit, Retail and more.
- Working to handle support requests, debugging and brainstorming to resolve issues with the product.

Chief Operator, [WVBR-FM & Cornell Media Guild](#); Ithaca, NY – March 2020-March 2021

- Leading the hardware and software based technical operations of WVBR-FM, [CornellRadio.com](#), EBR and Cornell Media Guild in Ithaca, NY.
- Managing the Engineering department by scheduling all repairs, upgrades, and scheduling engineers to be on call to provide on-scene support.

Intern Lead Developer, COVID-19 Contact Tracing Initiative, [ZODAJ Africa](#); Remote Work – May 2020-July 2020

- Setting up a Contact Tracing system for SARS-CoV-2/COVID-19 cases in Senegal.
- Enabling the local Senegalese governing powers to use the system to implement public policy and public health initiative to manage the spread of cases.

Web Director, [WVBR-FM & Cornell Media Guild](#); Ithaca, NY – March 2019-March 2020

- Single-handedly redesigning, managing and updating the dynamic WVBR-FM Website, [CornellRadio.com](#) Website and Cornell Media Guild Website (<http://www.cornellmedia.org>) for desktop, tablet and mobile.
- Acting as IT support for all DJs and staff members of [WVBR-FM](#), [CornellRadio.com](#) and [Cornell Media Guild](#).

Specialized Skills

Programming Languages: C++, Python, Java, HTML, CSS, Javascript, Matlab, Verilog Code, Ruby, SQL, PHP, C#, C, Batch, Shell

Foreign Languages: Spanish (Intermediate)

Licenses and Certifications: Microservices Software Architecture: Patterns and Techniques, IBM Agile Explorer, IBM Agile Advocate, Docker for the Absolute Beginner - Hands On - DevOps, Learn and Understand NodeJS, IBM Cloud Garage Test-Driven Development (TDD), Enterprise Risk Management, Enterprise Design Thinking Practitioner, Enterprise Design Thinking - Team Essentials for AI, Big Data 101, Deep Learning Essentials, IBM Virtual Collab.

Project Work

Full Portfolio: <https://www.michelledominiquedavies.info/>

Data Science and Analytics:

- **Death and Economic Growth:** This was my final project for INFO 2950: Introduction to Data Science at Cornell University for Spring 2021.
- The main question that I have chosen to explore is: *What does a Nation's trends in Economic Growth tell us about its causes of Death?*
- **Webpage Summary:** <https://www.michelledominiquedavies.info/portfolio/Death-and-Economic-Growth---Data-Science-Project>
- **Download Project Link (zip):** https://10f34fe8-a6e8-4a6b-9bc2-9f0550b362f5.filesusr.com/archives/eba494_e701e8ecea874df88f9add22b5c7b0b9.zip?dn=mdd94%25203.zip

Robotics and Computer Engineering:

- **The Mood Lights Project:** <https://www.michelledominiquedavies.info/portfolio/The-Mood-Lights-Project>
- **Intelligent Physical Systems Class Portfolio:** <https://pages.github.coecis.cornell.edu/mdd94/mdd94.github.io/>

Internet of Things (IoT):

- **TCAT: LoRaWAN System:** Group Project by by Michelle D. Davies BSc ECE '22, Andrew Lin MEng ECE '21, and Kira Weinberg BSc MAE '22
- Our vision for our project was to create a LoRaWan solution for TCAT to send their data from busses, to their central server. The challenge that we were addressing was to see if LoRaWan is a valid option for TCAT to move towards, and away from cellular which would save them money as well as help build the early open-source infrastructure for other companies to access affordable internet connectivity for their projects. We designed a prototype that could take its own GPS data, and send it through LoRaWAN and then map the gateway coverage of TCAT routes.
- **Webpage Summary:** <https://www.michelledominiquedavies.info/portfolio/Internet-of-Things%3A-TCAT-Project>
- **PDF Report:** https://10f34fe8-a6e8-4a6b-9bc2-9f0550b362f5.filesusr.com/ugd/eba494_68bb22f46186469ca9913bc2978a586b.pdf