

# MICHAEL SEXTON

New York, NY | 914-588-4734 | ms3648@cornell.edu | [LinkedIn](#) | [michaeljsextion.com](#)

## EDUCATION

**Cornell University**, New York, NY

**Expected May 2024**

Master of Engineering in Computer Science

- Merit Scholarship Recipient | Co-President of the Cybersecurity Club | Cornell Tech Campus

*Relevant Coursework:* Machine Learning Engineering • Big Data • Applied Machine Learning • Security and Privacy

**University of Wisconsin-Madison**, College of Engineering, Madison WI

**August 2018-May 2022**

Bachelor of Science, double major in Computer Engineering and Computer Science

- Artificial Intelligence Club, Data Science Club, Software Development Club

*Relevant Coursework:* Artificial Intelligence • Neural Networks • Database Management Systems • Data Structures

## TECHNICAL SKILLS

Programming Languages: Python, SQL, Java, C++, C

Skills/Libraries: Machine Learning, Data Science, Pandas, NumPy, Plotly, Jupyter, PyTorch, Pandas, scikit-learn, Git, Docker, AWS, Kubeflow, Linux, CNN, DNN, LSTM, NLP, Time Series Analysis

**IBM, Data Scientist and Software Engineer**, Poughkeepsie, NY

**June 2021-July 2023**

- Executed and deployed a Machine Learning pipeline using SQL, Python, and Kubeflow to predict the failure of CPUs deployed in the field for over 10,000 Mainframes up to 30 days early, eliminating unexpected downtime
- Designed, developed, tested, and deployed custom software solutions for engineers using SQL and Python to predict the failure of thermal and power systems in all Mainframes, ensuring 100% uptime and decreasing reactive repairs
- Responsible for the onboarding and training of new Data Scientists on the team
- Started as Intern, hired part-time during undergraduate education, hired full-time after graduation
- IBM Chess Team

**Code Ocean, Data Scientist (Promoted from Intern)**, New York, NY

**June 2020-April 2021**

- Engineered and integrated features using AWS and Docker to implement large-scale bioinformatics pipelines with parallel execution decreasing processing time by 60% for Code Ocean's Computational Reproducibility Platform
- Designed and executed Data Science projects using Python that increased user retention, generated new users, and increased user productivity as well as multiple competitive analysis

**Paragon Global Markets, Data Analysis Intern**, New York, NY

**June 2019-August 2019**

- Developed and implemented a custom financial reporting software using Python, SQL, and Tableau creating actionable insights into the business

**Layer 7 Consulting, Intern**, New York, NY

**June 2018-August 2018**

- Conducted independent site visits for hedge funds, brokerage firms, trading businesses, and law firm clients to perform diagnostics and remediation of critical hardware and software

## ACADEMIC PROJECTS

**Cornell University, Computer Science Department**, New York, NY

**August 2023-May 2024**

- Machine Learning Engineering: Built a Pytorch replica, implementing Autodifferentiation, Tensors, GPU, and Parallel Processing.

**University of Wisconsin-Madison, Computer Engineering Department**, Madison, WI

**September 2021-May 2022**

- Neural Networks: Tested different data augmentation approaches to classify images of various cities using TensorFlow, Python, and transfer learning of the RESNET model achieving an 80% accuracy rate. **Team Captain**
- Engineering Capstone: Built the robot BB8 from Star Wars from scratch with a custom-built circuit board and accompanying Bluetooth Android control application in Java using Android Studio. **Team Captain**
- Computer Architecture: Designed and implemented a 16-bit five-stage pipelined MIPS processor with integrated data and instruction cache in Verilog. **Team Captain**

## LEADERSHIP EXPERIENCE

**University of Wisconsin-Madison, Panelist**, 2023 Data Science Research Bazaar, Madison, WI

**June 2023**

- Selected as a guest speaker to discuss employment trends and offer career guidance to students entering the workforce.

## PERSONAL INFORMATION

Hobbies: hiking, running, basketball, chess

US Citizen