MICHAEL SEXTON

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EDUCATION

Cornell University   **August 2023 - May 2024**
Master's, Computer Science
- **Merit Scholarship Recipient** | Co-President of the Cybersecurity Club | Cornell Tech Campus | Student Ambassador
- Relevant Coursework: Machine Learning Engineering, Big Data, Applied Machine Learning, Security and Privacy

University of Wisconsin - Madison   **August 2018 - May 2022**
Bachelor's, Computer Engineering and Computer Science
- **Dean's Honor List**
- Artificial Intelligence Club, Data Science Club, Software Development Club
- Relevant Coursework: Artificial Intelligence, Neural Networks, Database Management Systems, Data Structures

PROFESSIONAL EXPERIENCE

IBM   **Poughkeepsie, NY, USA**
Data Scientist and Software Engineer   *June 2021 - July 2023*
- Executed and deployed a Machine Learning pipeline using **SQL**, **Python**, and **Kubeflow** to predict the failure of CPUs in 10,000 Mainframes up to **30 days early**, eliminating downtime costs.
- Designed and maintained custom reporting structures for the z16 and z15 mainframes, supporting the Thermal, Power, and Optical teams in continuous health monitoring of all systems.
- Onboarded, trained, and **mentored** new Data Scientists.
- Started as Intern, hired part-time during undergraduate education, hired full-time after graduation

Code Ocean   **New York, NY, USA**
Data Scientist   *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.
- Boosted user retention and acquisition by replicating research papers on the CO platform, enhancing engagement, and expanding the user base, utilizing **Docker** and **Python**
- Started as Intern, hired part-time during undergraduate education.

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

PROJECTS

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

SKILLS

Languages:	Python, SQL, JavaScript, Java, C++, C
Packages:	Pandas, Numpy, PyTorch, TensorFlow, Keras, Plotly, Matplotlib, Jupyter
Databases:	DB2, Firestore, Postgres, MySQL, MongoDB
Frameworks:	Docker, Spark, Kubernetes, Kubeflow, React, Firebase, CUDA
Tools:	Verilog, Git, Vercel, Linux, Tableau, Postman
Expertise:	Data Science, Software Engineering, Machine Learning, Time Series Analysis, Backend, Frontend
Citizenship:	US Citizen, Irish Citizen