

MICHAEL SEXTON

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EDUCATION

Cornell University, New York, NY

August 2023-May 2024

Master of Engineering in 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, 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

PROFESSIONAL EXPERIENCE

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.
- Building Startup Systems: Developed, built, and deployed a marketplace using a Next.js React frontend, integrated with Firestore for database management and Firebase Authentication for user security.

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**

TECHNICAL SKILLS

- **Programming Languages:** Python, SQL, Java, C++, JavaScript
- **Tools/Packages:** Pandas, Numpy, Docker, AWS, Spark, Kubernetes, Kubeflow, Keras, PyTorch, Tensorflow, Plotly, Matplotlib, Jupyter, Verilog, Git, React, Vercel, Firebase, CUDA, Tableau, Linux, DB2
- **Areas of Expertise:** Data Science, Machine Learning, Data Analysis, Time Series Analysis, Deep Learning, Neural Networks, Natural Language Processing, Backend, Frontend, Product Lifecycle, Communication Skills
- **Citizenship:** US Citizen, Irish Citizen