

2124 W Evergreen Ave,
Chicago, IL 60622

David McDevitt

(571) 271-8502
davidwmcdevitt@gmail.com
davidwmcdevitt.github.io

Education

Evanston, IL	Northwestern University	September 2022 – December 2023
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- M.S. in Artificial Intelligence. GPA: 3.9
- Graduate Coursework: Deep Generative Modeling; Digital Signal Processing; Natural Language Processing; Reinforcement Learning Algorithms; Deep Learning Methods; Computer Vision Applications.

Boston, MA	Northeastern University	September 2013 – December 2017
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- B.S. in Economics, B.A in International Affairs. GPA: 3.5
- Undergraduate Coursework: Applied Econometrics; Statistical Modeling; Economic Theory.

Employment

Graduate Researcher	Northwestern University	March 2023 – Present
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Pediatric Speech Technologies and Acoustic Research Lab

- Constructed a series of deep learning audio classification models and conducted experiments to evaluate their effectiveness at processing audio recordings for pediatric speech technology research.

Strategic Analytics, Associate	Circana	May 2021 – January 2023
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- Managed a multi-year forecasting engagement for a leading household products manufacturer, which included ownership of all model pipelines and technical resources, while maintaining support from client business units.
- Acted as the domain expert for all projects pertaining to in-store display optimization, including a large scale study for a multinational drink and brewing company targeting in-store display impacts on merchandising lift.
- Developed an online Shiny platform to host automation R and Python based automation tools for use across the Strategic Analytics practice.

Associate	Charles River Associates	January 2020 – May 2021
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- Conducted quantitative analysis and constructed exhibits to support expert testimony in litigation pertaining to regulation in the telecommunications, healthcare, and retail commodities sectors.
- Distilled multiple years of transaction data and applied economic theory and legal precedent to construct a comprehensive damages model for breach of contract litigation in the artificial turf industry.
- Improved cross-functional communication by acting as the primary data resource for counsel, client, and expert in multiple TCPA compliance class-action suits.

Technical Experience

Projects

- **Isolating Child Speech using Convolutional Neural Networks** (2023). Submission to the 2024 Conference on Motor Speech and Signal Analytics.
- **Adversarial Reverb** (2023). Audio transformation pipeline leveraging CycleGAN architecture to manipulate audio in the mel spectrogram domain.

Additional Experience and Awards

- **Teaching Assistant (2023):** Fundamentals of Data Science Seminar

Languages and Technologies

- Python; PyTorch; R; MATLAB; AWS; GCP; SQL