

Darryl Hannan

Machine Learning PhD Student

@ dwh48@drexel.edu

📍 San Antonio, TX

🌐 Homepage

🌐 LinkedIn

Work Experience

NSF Fellow

Drexel University

📅 June 2022 - Present

📍 Philadelphia, Pennsylvania (Remote)

- Conducted research on extending sparse coding models to various ultrasound classification tasks.

Artificial Intelligence Engineer

Drexel University

📅 September 2021 - June 2022

📍 Philadelphia, Pennsylvania (Remote)

- Implemented and applied deep sparse coding techniques to ultrasound classification task.
- Deployed model in iOS, optimizing to run within seconds on a mobile device.

NSF Fellow

University of North Carolina at Chapel Hill

📅 August 2018 - August 2021

📍 Chapel Hill, North Carolina

- Conducted research in cutting edge computer vision and natural language processing techniques, including multimodal question answering, story visualization, and more.

NLP Research Intern

Tencent AI Lab (US)

📅 Summer 2020

📍 Seattle, Washington (Remote)

- Worked with a team of researchers on using dialogue generation to improve conversational QA.

Applied ML Fellow/Student Research Scientist

Los Alamos National Laboratory

📅 Summer 2017 and 2018

📍 Los Alamos, New Mexico

Papers/Projects

- MobilePTX: Sparse Coding for Pneumothorax Detection Given Limited Training Examples (IAAI 2023)
- StoryDALL-E: Adapting Pretrained Text-to-Image Transformers for Story Continuation (ECCV 2022)
- Improving Generation and Evaluation of Visual Stories via Semantic Consistency (NAACL 2021)
- ManyModalQA: Modality Disambiguation and QA over Diverse Inputs (AAAI 2020)
- Deep Sparse Coding for Invariant Halle Berry Neurons (CVPR 2018)
- Emojis and Weather (CCSCNE 2018)
- Learning the McGurk Effect from Raw Input (Senior Project 2018)

Areas of Expertise

- Machine Learning
- Natural Language Processing
- Computer Vision

Technical Skills

- Python (PyTorch, Keras, Tensorflow, NumPy, Pandas, SciKit-Learn, Matplotlib, Beautiful Soup, NLTK, Spacy, OpenCV, Transformers)
- Unix Systems
- Git
- SQL (Oracle)

Education

PhD in Computer Science

Drexel University

📅 June 2022 - Present

📍 Philadelphia, Pennsylvania

Master's in Computer Science

University of North Carolina at Chapel Hill

📅 August 2018 - May 2021

📍 Chapel Hill, North Carolina

Bachelors in Computer Science

Villanova University

📅 August 2014 - May 2018

📍 Villanova, Pennsylvania

GPA: 3.77

Awards

- National Science Foundation GRFP Fellowship (15% acceptance)
- Applied Machine Learning Summer Research Fellowship (10% acceptance)
- Villanova Center for Research and Fellowships Research and Travel Grant