Darryl Hannan

Artificial Intelligence Engineer

@ hannandarryl@gmail.com Austin, TX Homepage LinkedIn

Work Experience

Artificial Intelligence Engineer

Drexel University

September 2021 - Present Philadelphia, Pennsylvania (Remote)

- **Implemented and applied deep sparse coding techniques** to medical imaging classification tasks.
- Deployed these models within iOS, optimizing to run within seconds on a mobile device.

Research Assistant

University of North Carolina at Chapel Hill

August 2018 - August 2021 Chapel Hill, North Carolina

- Applied **state-of-the-art machine learning and NLP techniques** to acquire data insights and establish baselines.
- Used **web scraping and crowdsourcing tools** to collect and label new multi-modal datasets.
- Published papers at top AI, NLP, and Computer Vision venues.

NLP Research Intern

Tencent AI Lab (US)

Summer 2020 Seattle, Washington (Remote)

- Remotely 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

- Learned a new machine learning framework, Petavision, to develop a biologically plausible multimodal generative autoencoder (publication at CVPR 2018).

Junior Java Developer

TS Partners Inc.

June 2013 - June 2017 King of Prussia, Pennsylvania

- Worked as part of a Java development team in an effort to rebuild shareholder accounting software as a web-based application.

Education

Masters of Science in Computer Science

University of North Carolina at Chapel Hill

August 2018 – May 2021

Chapel Hill, North Carolina

Bachelors of Science in Computer Science

Villanova University

August 2014 – May 2018

Villanova, Pennsylvania

GPA: 3.77

Areas of Expertise

- Machine Learning
- Natural Language Processing
- Software Engineering
- Data Collection and Visualization

Technical Skills

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

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

Papers/Projects

- 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)