# **Darryl Hannan**

#### **Data Scientist**

- @ hannandarryl@gmail.com
- Carrboro, NC
- % Homepage
- % LinkedIn

## **Work Experience**

#### Research Assistant

#### **University of North Carolina at Chapel Hill**

## August 2018 - August 2021

- Chapel Hill, North Carolina
- Used web scraping and crowdsourcing tools to collect and label new multimodal datasets.
- Applied existing state-of-the-art machine learning and statistical techniques to acquire data insights and establish baselines.
- Worked efficiently independently on open-ended problems without clear solutions.

#### **NLP Research Intern**

#### Tencent AI Lab (US)

Summer 2020

- ♀ Seattle, Washington
- Worked with a team of researchers on using dialogue generation to improve conversational QA.
- Quickly adapted and contributed to these previously unfamiliar domains using generative language techniques and the Transformers library.

# Applied ML Fellow/Student Research Scientist Los Alamos National Laboratory

**Summer 2017 and 2018** 

- Learned an unfamiliar framework, Petavision, to develop a biologically plausible multimodal generative autoencoder (publication at CVPR 2018).
- Applied biologically-inspired sparse-coding techniques to language, seeking to utilize top-down feedback to improve sentence-level representations.
- Took part in a summer lecture series covering various machine learning techniques and exposing students to interesting application areas in the lab.

#### Junior Java Developer

#### TS Partners Inc.

🛗 June 2013 - June 2017

- ♥ King of Prussia, Pennsylvania
- Ported hundreds of thousands of lines of code from a Delphi shareholder system to a web based Java application, and helped maintain this system as it was deployed.
- Used Oracle SQL to maintain shareholder records and provide automatically generated reports to customers.

# **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

## Summary

Masters graduate seeking full-time remote employment, starting in mid-August, as a data scientist.

# **Areas of Expertise**

- Machine Learning
- Natural Language Processing
- Computer Vision
- Data Collection and Visualization

### **Technical Skills**

- Python (PyTorch, Keras, NumPy, Pandas, SciKit-Learn, Matplotlib, Beautiful Soup, NLTK, Spacy, OpenCV)
- 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)