

# CARY MURRAY

+1 630 261 5888 | CAROLYN.ELIZABETH.MURRAY(AT)GMAIL.COM | [github: CMURRAY7](#) | [HTTPS://CMURRAY7.GITHUB.IO/](https://CMURRAY7.GITHUB.IO/)

## EDUCATION

### UNIVERSITY OF ILLINOIS

**MCS** in Computer Science

01/2018 – 12/2018

### NORTHWESTERN UNIVERSITY

**BS** in Human Communication Sciences

**Second Major** in Computational Neuroscience

09/2013 – 6/2017

GPA: 3.71

## SKILLS

**Languages:** Python, MATLAB, R, C++

**Technologies:** Tensorflow, Keras, Num/SciPy, AWS, pandas, scikit-learn,

**Research:** Data analysis, digital signal processing, visualization, statistical methods, big data processing

## RELEVANT COURSEWORK

AI Programming • Machine Learning: Foundations, Applications and Algorithms • Machine Perception of Music and Audio • Introduction to Robotics • Natural Language Processing • Audio Computing Lab • Computer Vision

## EXPERIENCE

IBM • DURHAM, NC • JUNE – SEPTEMBER 2017

### COGNITIVE SOFTWARE DEVELOPER INTERN

- Developed LSTM recurrent neural network model to predict average latency of requests to a Watson Service utilizing time series data from multiple sources
- Increased lead-time of existing model from 1-second to 15-minute predictions
- Self-taught Deep Learning methods to aid design of model

LANGUAGE AND COMPUTATION LAB • NORTHWESTERN UNIVERSITY • 2015 - PRESENT

### UNDERGRADUATE RESEARCHER

- Implement word recognition model using computer vision techniques and analyze simulated outputs to characterize how humans use visual information during reading
- Presented in NU's Computational Research Day Poster Competition and Women in Machine Learning Workshop amongst other data-heavy research
- Develop and maintain lab website designed to present findings for public understanding

AUDITORY RESEARCH LAB • KNOWLES HEARING CENTER • 2013 - 2015

### UNDERGRADUATE RESEARCHER

- Conducted data collection and analysis of sounds emitted by the ear in a cross-modal, perception experiment to refine clinical testing methods
- Developed poster for participation in Society for Neuroscience 2015 conference
- Identified and corrected problems in lab's proprietary software and signal processing programs as issues arose

NORTHWESTERN UNIVERSITY NEURO CLUB • 2014 - 2016

### CURRICULUM + SPEAKER CHAIR

- Integrally involved with creation of Neuroscience Major (approved May 2015) as computational representative in discussions with administrators
- Managed course development for "Neuroscience of College", a student-led, full-credit seminar offered Spring 2016