

## **CONTACT ME:**

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github.com/nighttime

CURRENTLY: Master's student and Natural Language Processing researcher, seeking NLP opportunities for Fall 2019

#### **EDUCATION**



#### UNIVERSITY OF EDINBURGH

M.Sc. Artificial Intelligence, Aug 2019 Natural Language Processing Specialism Edinburgh, United Kingdom



#### **BROWN UNIVERSITY**

B.Sc. Computer Science, 2017

Providence, RI, United States

#### SELECTED COURSEWORK

Accelerated NLP • Formal Semantics

Machine Learning • Deep Learning

Computational Cognitive Science

#### **RESEARCH EXPERIENCE**

# **Research in Computational Semantics**

Advised by Prof. Mark Steedman.

- Master's dissertation in a novel method for negation scope detection in sentences.
- Research in pragmatic inference of presupposition via a large-scale entailment graph.

#### **Independent NLP Research**

Research on representations of lexical semantics. Read it here: <u>nmckenna.me/research</u>

# **Brown Computational Cognitive Science Reading Group** Summer 2018

Led by Prof. Ellie Pavlick.

Discussed current research in language processing and concept learning.

## **PROFESSIONAL EXPERIENCE**



# **TAPTOBOOK** Product Manager June 2017 – Aug 2018

- Directed the product development roadmap. Identified business needs, researched solutions, and prioritized work for the 10-person development team.
- Overhauled the core business model with new technologies and user experiences, separating TTB from competing products. The company is now growing rapidly and nearly profitable.
- Adapted the platform to power large-scale national brands including Planet Fitness, Gold's Gym, and Buffalo Wild Wings.



## YELP Product Management Intern Summer 2016

• Planned yelp.com notifications. Experimented with ML Group, growing review highlights engagement by 13%.



## YELP Engineering Intern Summer 2015

 Built research-driven manager for Yelp Reservations on iPad, reducing restaurant hosts' time spent by 88%.

### **SKILLS**

- Formal analysis of language semantics and design of practical computer models for language understanding
- · Proficient in Python, C++, Swift/iOS, Java
- Skilled in Machine Learning frameworks: PyTorch, TensorFlow, and Keras

# IMPACT

# **Teaching Assistant, Brown** 2015 – 2017

Hands-on with 570 students over 4 Computer Science courses. Designed curriculum, held office hours and labs, and mentored student projects.

## Sponsorship Organizer, Hack@Brown

Raised \$45,000 for Brown's hackathon from partners Google, Microsoft, and TwoSigma.

#### **PROJECTS**

### **Document Summarizer, Python & TensorFlow**

Summarizes documents using a deep convolutional neural network to extract the most sentimental sentences, based on Google DeepMind paper.

## Deep Q-Network for Virtual Soccer, Python & PyTorch

Reinforcement algorithm with neural Q-function approximation for player control.

## **High-Frequency Trading Agent, Java**

Automatic trading algorithm for a simulated market. Traded securities with 14 agents for net-positive, 2nd best outcome in the group.

## StingRay Renderer, OpenGL & C++

Real-time GPU raytracer that renders interactive 3D scenes using alternative on-device caching to accelerate render time.

## Two to Infinity, iOS ☆ 16,000 Downloads

Mobile game of 2048. Ranked Top 100 Strategy Games in US and Canada.