# Nick McKenna

Informatics Forum 5.19 10 Crichton Street Edinburgh, EH8 9AB

**Email** GitHub

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Education



### The University of Edinburgh

Ph.D. Informatics 2019 - Present

M.Sc. Artificial Intelligence, Distinction

2019



#### **Brown University**

**B.Sc.** Computer Science

Advisor: Mark Steedman

2017

### **Publications**

Preprints

Nick McKenna and Mark Steedman. Smoothing Entailment Graphs with Language Models. ArXiv, 2022. Paper Link

Conference Papers

Nick McKenna, Liane Guillou, Mohammad Javad Hosseini, Sander Bijl de Vroe, Mark Johnson, and Mark Steedman. Multivalent Entailment Graphs for Question Answering. EMNLP, 2021. Paper Link

Nick McKenna and Mark Steedman. Learning Negation Scope from Syntactic Structure. \*SEM, 2020. Paper Link

Workshop Papers

Sander Bijl de Vroe\*, Liane Guillou\*, Miloš Stanojević, Nick McKenna, and Mark Steedman. Modality and Negation in Event Extraction. Challenges and Applications of Automated Extraction of Sociopolitical Events from Text (CASE) at ACL, 2021.

Paper Link

## **Professional Experience**

## Applied Scientist Intern, Amazon, Alexa Knowledge

Jun-Oct 2022

Researched new methods in natural language inference and Knowledge Graph-based Question Answering. Developed a novel end-to-end QA model using a differentiable knowledge graph.

### Product Manager, TapToBook

2017 - 2018

Identified business needs, researched and planned solutions, and prioritized work for the development team. Overhauled the core business model, focusing on AI-driven solutions.

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#### Product Management Intern, Yelp

Summer 2016

Launched experiments with the Machine Learning team, which grew engagement with extracted user review highlights by 13%. Conducted extensive data analysis in SQL for product planning.

## Engineering Intern, Yelp

Summer 2015

Developed a streamlined new tool to help restaurant hosts make new guest reservations (for Yelp Reservations on iPad). This tool reduced time spent on this task by 88%.

## Scientific Service

Talk Panelist

"Getting into NLP Research" at NAACL 2021

Conference Referee

EACL	2023
EMNLP	2021
COLING	2020
STARSEM	2020, 2021

## Awards & Honors

Huawei Ph.D. Scholarship Award	2019
Outstanding M.Sc. Dissertation: "Learning Negation Scope Semantics with Structure"	2019

## **Teaching**

Graduate TA at the University of Edinburgh

Accelerated Natural Language Processing [M.Sc. course]	2019 - 2021
Natural Language Understanding and Machine Translation [M.Sc. course]	2020 - 2022
Undergraduate TA at Brown University	

Computational Linguistics	2017
Computer Graphics	2016
Computer Architecture	2015

## Skills

- \* Design of machine learning models for automatic language understanding.
- \* PyTorch machine learning frameworks; Python, Java, C++, Swift/iOS.
- \* Data analysis with SQL & Python numerical libraries numpy, pandas, scikit.

## Extracurricular

#### Sponsorship Organizer, Hack@Brown

2015 - 2017

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

### **Independent App Developer**, Nighttime Software

2012 - 2016

Developed various apps and games for iOS. Notably, 2048: Two to Infinity was downloaded over

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 $16,\!000$  times and ranked in the top 100 strategy games, USA and Canada.