## HAYLEY ROSS

https://rossh2.github.io hayleyross@g.harvard.edu

#### **EDUCATION**

### PhD in Linguistics, Harvard University, United States 2020 - pres Research in semantics (theoretical and experimental) and computational linguistics > Advisor: Gennaro Chierchia > GPA 4.0 MS in Computational Linguistics, Brandeis University, United States 2018 - 2020> Focus on computational semantics, modal logic, annotation and NLP > Master's Thesis 'The Falsity of the Consequent in Contrastive Conditionals' Supervisor: Prof. James Pustejovsky > GPA 4.0 Master of Mathematics, University of Oxford, United Kingdom 2011 - 2015> First class honors (master's year), 2.i (bachelor's years) > Final average 77.25/100 [70 and above awards a first class degree] Focus on set theory, logic and topology Master's Thesis 'The Iterative Conception of Set Theory' Supervisor: Dr. Robin Knight Wettingen Cantonal School, Switzerland 2007 - 2011> Final average 5.85/6 (highest in year) > Focus on mathematics, physics, philosophy and Latin

#### **PUBLICATIONS**

Min, Bonan, **Hayley Ross**, [6 others], and Dan Roth (2021). 'Recent Advances in Natural Language Processing via Large Pre-Trained Language Models: A Survey.' *arXiv preprint arXiv:2111.01243*.

**Hayley Ross** (in review). 'Implications of the Danish Definiteness Alternation for Concord in Nanosyntax'.

**Hayley Ross**, Jonathon Cai, and Bonan Min (2020). 'Exploring Contextualized Neural Language Models for Temporal Dependency Parsing.' In *Proceedings of the 2020 Conference on Empirical Methods in Natural Language Processing (EMNLP)*.

**Hayley Ross** (2020). The Falsity of the Consequent in Contrastive Conditionals'. In *Proceedings of the ESSLLI & WeSSLLI Student Session 2020*.

### **CONFERENCE PRESENTATIONS**

**Hayley Ross**, Gennaro Chierchia and Kathryn Davidson (2022). 'Quantifying weak and strong crossover for wh-crossover and proper names.' At *Sinn und Bedeutung 27*.

# **EXPERIENCE**

Research Intern at Raytheon BBN, Cambridge, United States  Conducted controlled experiment to compare two methods of event extraction  Analyzed dataset using embedding t-SNEs and dependency parses	Summer 2022
Research Intern at Raytheon BBN, Cambridge, United States  > Researched neural network architectures for parsing temporal relations  > Implemented and improved a neural model based on 2018/2019 papers  > Achieved 8 point F1 improvement over state of the art (see publications)	Summer 2019
<ul> <li>Software Developer at Ghyston, Bristol, United Kingdom</li> <li>Developed full-stack projects across industries and languages, including a 10x faster CSV-to-SQL processor, a visual template UI for financial XML, and a live bus tracker</li> <li>Managed a two-person project, handling proposal, implementation and final launch</li> <li>Trained client developers in new languages, providing templates and code reviews</li> <li>Mentored students from Bristol University writing a C#/Xamarin mobile app</li> </ul>	2015 – 2018
Intern at TNG Technology Consulting, Munich, Germany  Developed a graphical interface in JavaScript for a custom formal grammar  Reviewed code for other interns on the project	Summer 2012
Intern at Ergon Informatik, Zurich, Switzerland  Developed a module in Java to compare GPS data sets	Summer 2011
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Developed a module in Java to compare GPS data sets  ACTIVITIES  Harvard-Radcliffe Collegium Musicum, Harvard University  Brandeis University Chamber Singers, Brandeis University  Bristol Choral Society, Bristol, United Kingdom  Code Club Volunteer, Bristol, United Kingdom  Taught children from disadvantaged backgrounds how to program in Scratch	2020 - pres 2018 - 2020 2015 - 2018
ACTIVITIES  Harvard-Radcliffe Collegium Musicum, Harvard University  Brandeis University Chamber Singers, Brandeis University  Bristol Choral Society, Bristol, United Kingdom  Code Club Volunteer, Bristol, United Kingdom  Taught children from disadvantaged backgrounds how to program in Scratch  Certified STEM Ambassador  Peer Support Program, University of Oxford	2020 - pres 2018 - 2020 2015 - 2018 2016

# LANGUAGES AND SKILLS

- > Python, Java, SQL, JavaScript, TypeScript, CSS, LaTeX, Git (proficient)
- > Haskell, C#, Bash, Unix / Linux (familiar)
- > German (bilingual), French and Latin (proficient)

### **A**WARDS

Douglas Dillon Fellowship Fund, Harvard	2020 - 2022
Aravind K. Joshi Award for Outstanding Achievement in Computational Linguistics, Brandeis	2020
College Scholarship/Exhibition, Oxford (awarded yearly)	2012 - 2015
William Buckland Award, Oxford (awarded termly)	2012 - 2013
Silver Medal, Swiss Mathematics Olympiad, at national level	2011
Bronze Medal, Swiss Mathematics Olympiad, at national level	2010