

# Neil Rathi

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## Education

2022–      BS in Math, Stanford University  
2018–2022      Palo Alto High School

## Experience

2022–      Research Assistant, Stanford ALPS Lab  
2020–2022      Researcher, UC Irvine Language Processing Group  
2020–      Math Tutor, Various

## Awards

2022      CogSci Sayan Gul Undergraduate Award  
2022      8th Place Winner, Regeneron Science Talent Search  
2021      EMNLP Student Travel Grant  
2021      NSLI-Y Arabic Scholarship

## Publications

### CONFERENCE PAPERS

2022      **Neil Rathi**, Michael Hahn, and Richard Futrell. 2022. Explaining patterns of fusion in morphological paradigms using the memory–surprisal tradeoff. In *CogSci 2022*. **Best undergrad paper.**  
2021      **Neil Rathi**, Michael Hahn, and Richard Futrell. 2021. An information-theoretic characterization of morphological fusion. In *EMNLP*.  
2021      **Neil Rathi**. 2021. Dependency locality and neural surprisal as predictors of processing difficulty: Evidence from reading times. In *CMCL (@ NAACL)*.

### PRESENTATIONS

2022      **Neil Rathi**. 2022. Towards an information-theoretic model of inflectional morphology. UC Irvine Language Processing Group (Invited).  
2021      **Neil Rathi**, Michael Hahn, and Richard Futrell. 2021. Information-theoretic characterization of morphological fusion. SIGTYP @ NAACL. **Best paper.**  
2021      **Neil Rathi**. 2021. A neural network analysis of integration cost and surprisal. LSA 2021.

## Software

Python, Tensorflow, PyTorch, Java, R, HTML/CSS, JS, WebPPL