#### SCiL 2020 Schedule, Hilton New Orleans Riverside, Jan. 2-5

All oral presentations are in the Kabacoff room, and all posters are in the St. James Ballroom. Please see the LSA program for assigned poster numbers.

# **Thursday**

### 2:00 – 3:00 Tutorial: Finite-State Text Processing

Kyle Gorman (CUNY)

### 3:00 – 4:00 Formal Language Theory in Linguistics Works in Progress Short Talks

Shiori Ikawa (Rutgers University), Akane Ohtaka (Rutgers University), and Adam Jardine (Rutgers University). Quantifier-free tree transductions.

Marina Ermolaeva (The University of Chicago). Induction of Minimalist Grammars over morphemes. Phillip Burness (University of Ottawa) and Kevin McMullin (University of Ottawa). Modelling non-local maps as Strictly Piecewise functions.

Eric Meinhardt (UC San Diego), Anna Mai (UC San Diego), Eric Baković (UC San Diego), and Adam McCollum (Rutgers University). Questioning to Resolve Transduction Problems.

Huteng Dai (Rutgers) and Richard Futrell (UC Irvine). Information-theoretic characterization of the subregular hierarchy.

#### 4:00 - 5:30 Session I

4:00 Adam Liter (Department of Linguistics, University of Maryland) and Naomi H. Feldman (Department of Linguistics & UMIACS, University of Maryland). Modeling the learning of the Person Case Constraint. 4:30 Elliott Moreton (University of North Carolina, Chapel Hill). Evolving constraints and rules in Harmonic Grammar.

5:00 *Uriel Cohen Priva (Brown University), Shiying Yang (Brown University), and Emily Strand (Brown University).* The stability of segmental properties across genre and corpus types in low-resource languages.

#### 5:30 – 7:00 **Poster I**

Jillian K. DaCosta (University at Buffalo, The State University of New York) and Rui P. Chaves (University at Buffalo, The State University of New York). Assessing the ability of Transformer-based Neural Models to represent structurally unbounded dependencies.

Hannah Forsythe (University of California, Irvine) and Lisa Pearl (University of California, Irvine). Immature representation or immature deployment? Modeling child pronoun resolution.

Gasper Begus (University of Washington). Modeling unsupervised phonetic and phonological learning in Generative Adversarial Phonology.

*Natalia Talmina (Johns Hopkins University) and Tal Linzen (Johns Hopkins University).* Neural network learning of the Russian genitive of negation: optionality and structure sensitivity.

Aniello De Santo (Stony Brook University). MG Parsing as a Model of Gradient Acceptability in Syntactic Islands.

Andrew Potter (University of North Alabama). The Rhetorical Structure of Modus Tollens: An Exploration in Logic-Mining.

Debanjan Ghosh (Educational Testing Service), Elena Musi (Department of Communication and Media, University of Liverpool), Kartikeya Upasani (Facebook), and Smaranda Muresan (Data Science Institute, Columbia University). Interpreting Verbal Irony: Linguistic Strategies and the Connection to the Type of Semantic Incongruity.

*Yuhong Zhu (The Ohio State University).* Extending the Autosegmental Input Strictly Local Framework: Metrical Dominance and Floating Tones.

Robin Lemke (Saarland University), Lisa Schäfer (Saarland University), Heiner Drenhaus (Saarland University), and Ingo Reich (Saarland University). Script knowledge constrains ellipses in fragments – Evidence from production data and language modeling

Jonathan Rawski (Stony Brook University) and Hossep Dolatian (Stony Brook University). Multi-Input Strictly Local Functions for Tonal Phonology.

Gregory Kobele (University of Leipzig), Linyang He (Fudan University, Toyota Technological Institute at Chicago), and Ming Xiang (University of Chicago). The role of information theory in gap-filler dependencies.

Brandon Waldon (Stanford University) and Judith Degen (Stanford University). Modeling Behavior in Truth Value Judgment Task Experiments.

Mitchell Abrams (Advanced Resource Technologies, Inc.), Claire Bonial (U.S. Army Research Labs), and Lucia Donatelli (Saarland University). Graph-to-Graph Meaning Representation Transformations for Human-Robot Dialogue

R. Thomas McCoy (Johns Hopkins University), Tal Linzen (Johns Hopkins University), Ewan Dunbar (Université Paris Diderot – Sorbonne Paris Cité), and Paul Smolensky (Microsoft Research AI, Johns Hopkins University). Tensor Product Decomposition Networks: Uncovering Representations of Structure Learned by Neural Networks.

Connor Mayer (UCLA) and Max Nelson (University of Massachusetts, Amherst). Phonotactic learning with neural language models.

Shiori Ikawa (Rutgers University), Akane Ohtaka (Rutgers University), Adam Jardine (Rutgers University): Quantifier-free tree transductions

Marina Ermolaeva (The University of Chicago): Induction of minimalist grammars over morphemes Phillip Burness (University of Ottawa), Kevin McMullin (University of Ottawa): Modelling non-local maps as Strictly Piecewise functions

Eric Meinhardt (University of California, San Diego), Anna Mai (University of California, San Diego), Eric Baković (University of California, San Diego), Adam McCollum (Rutgers University): Questioning to resolve transduction problems

Huteng Dai (Rutgers University), Richard Futrell (University of California, Irvine): Information-theoretic characterization of the subregular hierarchy

# Friday

#### 9:00 – 10:00 **Session II**

9:00 Benjamin Newman (Stanford University), Reuben Cohn-Gordon (Stanford University), and Christopher Potts (Stanford University). Communication-based Evaluation for Natural Language Generation.

9:30 Timothee Mickus (Université de Lorraine, CNRS, ATILF), Denis Paperno (Utrecht University), Mathieu Constant (Université de Lorraine, CNRS, ATILF), Kees van Deemter (Utrecht University). What do you mean, BERT? Assessing BERT as a Distributional Semantics Model.

# 10:00 – 11:00 Invited talk: Pragmatic Reasoning in Large-Scale NLP Systems *Christopher Potts (Stanford Linguistics)*

# 11:00 – 12:00 Invited talk: What Should Constitute Natural Language "Understanding"?

Ellie Pavlick (Brown University)

#### 2:00 – 5:00 **Session III**

2:00 *Emily Morgan (UC Davis) and Roger Levy (MIT)*. Frequency-(in)dependent regularization in language production and cultural transmission.

2:30 Hang Jiang (Symbolic Systems Program, Stanford University), Haoshen Hong (Department of Computer Science, Stanford University), Yuxing Chen (Symbolic Systems Program, Stanford University), and Vivek Kulkarni (Department of Computer Science, Stanford University). DialectGram: Automatic Detection of Dialectal Variation at Multiple Geographic Resolutions.

3:00 Noga Zaslavsky (MIT), Terry Regier (University of California, Berkeley), Naftali Tishby (The Hebrew University), and Charles Kemp (University of Melbourne). Semantic categories of artifacts and animals reflect efficient coding.

3:30 Micha Elsner (The Ohio State University), Martha Johnson (The Ohio State University), Stephanie Antetomaso (The Ohio State University), and Andrea Sims (The Ohio State University). Stop the Morphological Cycle, I Want to Get Off: Modeling the Development of Fusion.

4:00 *Katharina Kann (New York University)*. Acquisition of Inflectional Morphology in Artificial Neural Networks With Prior Knowledge

4:30 Giorgio Magri (CNRS). A principled derivation of Harmonic Grammar.

## 5:00 – 6:00 SCiL Business Meeting

## Saturday

#### 9:00 – 10:30 **Session IV**

9:00 Alex Warstadt (New York University), Alicia Parrish (New York University), Haokun Liu (New York University), Anhad Mohananey (New York University, Electronic Arts), Wei Peng (New York University), Sheng-Fu Wang (New York University), and Samuel R. Bowman (New York University). BLiMP: A Benchmark of Linguistic Minimal Pairs for English.

9:30 Emily Ahn (University of Washington), Cecilia Jimenez (University of Pittsburgh), Yulia Tsvetkov (Carnegie Mellon University), and Alan W Black (Carnegie Mellon University). What Code-Switching Strategies are Effective in Dialog Systems?

10:00 Aarohi Srivastava (Dept. of Computer Science, Yale University), Robert Frank (Dept. of Linguistics, Yale University), Sarah Widder (Program in Cognitive Science, Yale University), and David Chartash (Center for Medical Informatics, Yale University). The Role of Linguistic Features in Domain Adaptation: TAG Parsing of Questions.

#### 12:00 – 1:30 **Poster II**

Andrea D. Sims (The Ohio State University). Inflectional networks: Graph-theoretic tools for inflectional typology.

Shohini Bhattasali (University of Maryland), Murielle Popa–Fabre (CNRS Université Paris Diderot–Paris 7), John Hale (University of Georgia), and Christophe Pallier (CEA Inserm Cognitive Neuroimaging Unit). Modeling Conventionalization and Predictability within MWEs at the Brain level.

Hai Hu (Indiana University Bloomington), Qi Chen (Indiana University Bloomington), Kyle Richardson (Allen Institute for Artificial Intelligence), Atreyee Mukherjee (Indiana University Bloomington), Lawrence S. Moss (Indiana University Bloomington), and Sandra Kuebler (Indiana University Bloomington).

MonaLog: a Lightweight System for Natural Language Inference Based on Monotonicity.

Angelina McMillan-Major (University of Washington, Seattle, USA). Automating Gloss Generation in Interlinear Glossed Text.

Maria Ryskina (Carnegie Mellon University), Ella Rabinovich (University of Toronto), Taylor Berg-Kirkpatrick (University of California San Diego), David Mortensen (Carnegie Mellon University), and Yulia Tsvetkov (Carnegie Mellon University). Where New Words Are Born: Distributional Semantic Analysis of Neologisms and Their Semantic Neighborhoods.

Hannah Youngeun An (University of Rochester) and Aaron Steven White (University of Rochester). The lexical and grammatical sources of neg-raising inferences.

Jacob Collard (Cornell University). Unsupervised Formal Grammar Induction with Confidence. Ayla Karakaş (Stony Brook University). An IBSP Description of Sanskrit /n/-Retroflexion.

Nazila Shafiei (Stony Brook University) and Thomas Graf (Stony Brook University). The Subregular Complexity of Syntactic Islands.

Yohei Oseki (Waseda University) and Alec Marantz (New York University). Modeling morphological processing in human magnetoencephalography.

Joseph Rhyne (Cornell University). Reconciling historical data and modern computational models in corpus creation.

Robert Malouf (San Diego State University), Farrell Ackerman (University of California San Diego), and Arturs Semenuks (University of California San Diego). Lexical databases for computational analyses: A linguistic perspective.

Sagar Indurkhya (Massachusetts Institute of Technology). Inferring Minimalist Grammars with an SMT-Solver.

Charlie O'Hara (University of Southern California). Frequency Matching Behavior in On-line MaxEnt Learners.

Yiding Hao (Department of Linguistics and Department of Computer Science, Yale University). Metrical Grids and Generalized Tier Projection.

Canaan Breiss (University of California, Los Angeles) and Colin Wilson (Johns Hopkins University). Extending adaptor grammars to learn phonological alternations.

David L. King (The Ohio State University), Andrea Sims (The Ohio State University), and Micha Elsner (The Ohio State University). Capturing Semantic Conditions on Russian Inflectional Morphology with Sequence-to-Sequence Models.

Arto Anttila (Stanford University), Scott Borgeson (Stanford University), and Giorgio Magri (CNRS). Equiprobable mappings in weighted constraint grammars.

Benjamin Storme (University of Lausanne) and Giorgio Magri (CNRS). Constraint summation in phonological theory.

#### 2:00 - 5:00 Session V

2:00 Jennifer Hu (Massachusetts Institute of Technology), Sherry Yong Chen (Massachusetts Institute of Technology), and Roger Levy (Massachusetts Institute of Technology). A closer look at the performance of neural language models on reflexive anaphor licensing.

2:30 Rui P. Chaves (Department of Linguistics, University at Buffalo, The State University of New York). What Don't RNN Language Models Learn About Filler-Gap Dependencies?

3:00 Max Nelson (University of Massachusetts, Amherst), Hossep Dolatian (Stony Brook University), Jonathan Rawski (Stony Brook University), and Brandon Prickett (University of Massachusetts, Amherst). Probing RNN Encoder-Decoder Generalization of Subregular Functions using Reduplication.

3:30 *Thomas Graf (Stony Brook University)*. Curbing Feature Coding: Strictly Local Feature Assignment. 4:00 *Dakotah Lambert (Stony Brook University) and James Rogers (Earlham College)*. Tier-Based Strictly Local Stringsets: Perspectives from Model and Automata Theory.

4:30 Hossep Dolatian (Stony Brook University) and Jonathan Rawski (Stony Brook University). Multi-Input Strictly Local Functions for Templatic Morphology.

# Sunday

# Workshop: Formal Language Theory in Linguistics

9:00 – 10:00 **Keynote – Title to be announced** 

Jeffrey Heinz (Stony Brook University)

10:00 – 11:00 Tutorial – Title to be announced

Alëna Aksenova (Stony Brook University)

#### 11:00 – 1:00 Formal Language Theory Panel Session

11:00 Regine Lai (City University of Hong Kong)

11:30 Meaghan Fowlie (Utrecht University)

12:00 Adina Williams (FAIR NYC)

12:30 Panel Discussion