# Aniello De Santo

# Curriculum vitae et studiorum

Department of Linguistics
University Of Utah

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④ MeLo Lab

#### Academic Affiliation

July 2020 - Assistant Professor Department of Linguistics, University of Utah.

Present Director: Mathematics of Language and Cognition (MeLo) Lab Coordinator: Computational Linguistics Certificate

#### Education

- 2015 2020 **Ph.D.** Department of Linguistics, Stony Brook University.

  Dissertation "Structure and Memory: A Computational Model of Storage, Gradience, and Priming"
- 2017 2020 Affiliated Student Institute for Advanced Computational Science (IACS), Stony Brook University
  - 2011-2013 Master's Degree in Computer Science and Engineering Università degli Studi di Pavia, Curriculum in Theory and Control of Dynamic Systems

    Thesis "Unexplained User Behaviours in Online Social Networks"
  - 2007-2011 Bachelor's Degree in Computer Science and Engineering Università degli Studi di Pavia

    Thesis "Individualization of models for the automatic control of glycemia in Type I Diabetes"

#### Journal Articles

- 2023 **A. De Santo**, A. Ferraro, A. Galli, V. Moscato, G. Sperli. *An action–reaction influence model relying on OSN user-generated content*. Knowledge and Information Systems.
- 2022 A. De Santo, A. Ferraro, A. Galli, V. Moscato, G. Sperli. *Evaluating time series encoding techniques for Predictive Maintenance*. Expert Systems With Applications.
- 2021 **A. De Santo** Italian Postverbal Subjects from a Minimalist Parsing Perspective. Lingue e Linguaggio.
  - **A. De Santo**, A. Galli, V. Moscato, G. Sperli. A deep learning approach for semi-supervised community detection in Online Social Networks. Knowledge-Based Systems.
  - **A. De Santo**, A. Galli, M. Gravina, V. Moscato, G. Sperli. *Deep Learning for HDD health assessment: an application based on LSTM*. IEEE Transactions on Computers.
- 2020 **A. De Santo** and J. Rawski. What can formal language theory do for animal cognition studies? Royal Society Open Science.

- 2018 A. De Santo. Commentary: Developmental Constraints on Learning Artificial Grammars with Fixed, Flexible, and Free Word Order. Front. Psychol. 9:276.
  - F. Amato, A. Castiglione, **A. De Santo**, V. Moscato, A. Picariello, F. Persia, G. Sperli. (2018). *Recognizing human behaviours in online social networks*, Computers & Security, ISSN 0167-4048.

# Book Chapters and Reviews

- 2022 **A. De Santo**. Finite-State Text Processing by Kyle Gorman and Richard Sproat. In Computational Linguistics (2022).
  - **A. De Santo** and J. Rawski. *Mathematical linguistics and cognitive complexity*. In *Handbook of Cognitive Mathematics*, Springer Nature (2022).
- 2015 S.K. Chang, L. Greco, A. De Santo. Sentiment detection in social networks using semantic analysis: a tool for sentiment analysis and its application in the cultural heritage realm. In Data Management in Pervasive Systems, Chapter 9. Colace et al. Editors, Springer Verlag, Berlin (2015).
  - F. Amato, L. Greco, F. Persia, S.R. Poccia, **A. De Santo**. Content-based multimedia retrieval. In Data Management in Pervasive Systems, Chapter 14. Colace et al. Editors, Springer Verlag, Berlin (2015).

# Peer-Reviewed Proceedings Articles

- 2022 M. H. Vu, A. De Santo, and H. Dolatian. Logical Transductions for the Typology of Ditransitive Proceedings of SIGMORPHON 19th (2022). Seattle July 14, 2022.
  - A. De Santo and S. Y. Lee. Evaluating Structural Economy Claims in Relative Clause Attachment. Proceedings of the Society for Computation in Linguistics 2022. Vol. 5, 65-75. Held Virtually Feb 7-9, 2022.
- 2021 H. Dolatian, A. De Santo and T. Graf. Recursive Prosody is not Finite State. Proceedings of SIGMORPHON 18th (2021). Held virtually August 5, 2021.
  - A. De Santo and A. Aksënova. Learning Interactions of Local and Non-Local Phonotactic Constraints from Positive Input. Proceedings of the Society for Computation in Linguistics (SCiL) 2021. Held virtually February 15-19, 2021.
  - **A. De Santo**. A Minimalist Approach to Facilitatory Effects in Stacked Relative Clauses. Proceedings of the Society for Computation in Linguistics (SCiL) 2021. Held virtually February 15-19, 2021.
- 2020 Antonio Galli, Vincenzo Moscato, Giancarlo Sperli, and A. De Santo. An Explainable Artificial Intelligence Methodology for Hard Disk Fault Prediction. Proceedings of the 2020 International Conference on Database and Expert Systems Applications (DEXA2020). Held virtually September 14-17, 2020.
  - **A. De Santo**. MG Parsing as a Model of Gradient Acceptability in Syntactic Islands. Proceedings of the Society for Computation in Linguistics (SCiL) 2020.
- 2019 T. Graf and A. De Santo. Sensing Tree Automata as a Model of Syntactic Dependencies. Proceedings of the 16th Meeting on the Mathematics of Language (MOL) 2019.

- **A. De Santo** and T. Graf. Structure Sensitive Tier Projection: Applications and Formal Properties. Proceedings of the 24st Conference on Formal Grammar (FG) 2019.
- **A. De Santo.** Testing a Minimalist Grammars Parser on Italian Relative Clause Asymmetries. Proceedings of Cognitive Modeling and Computational Linguistics Workshop (CMCL) 2019.
- 2016 A. De Santo, A. Aksënova and T. Graf. An Alternate View on Strong Lexicalization in TAG. Proceedings of the Twelfth International Workshop on Tree-Adjoining Grammars and Related Formalisms (TAG+) 2016
  - T. Graf, A. Aksënova and **A. De Santo**. A Single Movement Normal Form for Minimalist Grammars. Proceedings of the 21st Conference on Formal Grammar (FG-2016)
- 2015 F. Colace, M. De Santo, A. De Santo, A. Picariello. Connecting Times: Using Smart Technologies For Enhancing Ancient Downtowns Experience. Proceedings of the 3rd International Conference of Information and Communication Technology (ICoICT 2015)
  - F. Amato, A. De Santo, V. Moscato, A. Picariello, D. Serpico and G. Sperlí. A lexicon-grammar based methodology for Ontology population in e-health applications. Proceedings of the 9-th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS 2015)
  - F. Amato, **A. De Santo**, F. Gargiulo, V. Moscato, F. Persia, A. Picariello and S. R. Poccia. *SemTree: an index for supporting semantic retrieval of documents*. Proceedings of the IEEE DESWeb ICDE 2015
  - F. Amato, **A. De Santo**, F. Gargiulo, V. Moscato, F. Persia, A. Picariello and G. Sperlí. *A novel approach to query expansion based on semantic similarity measures*. Proceedings of the 4th International Conference on Data Management Technologies and Applications (DATA 2015)
  - F. Amato, A. De Santo, V. Moscato, F. Persia, S. R. Poccia and A. Picariello. *Partitioning of ontologies driven by a structure-based approach*. Proceedings of the IEEE 9th International Conference on Semantic Computing (ICSC2015)
  - F. Amato, **A. De Santo**, V. Moscato, F. Persia, A. Picariello, S. R. Poccia, G. Sperlí. *A structure-based approach for ontology partitioning*. Proceedings of SEBD 2015: 184-191
- 2014 F. Amato, A. De Santo, V. Moscato, F. Persia and A. Picariello. *Detecting unexplained human behaviors in Social Networks*, Proceedings of the IEEE Eight International Conference on Semantic Computing (ICSC2014)
  - F. Persia, F. Amato, F. Gargiulo, S. R. Poccia, and **A. De Santo**. Finding unexplained human behaviors in Social Networks. Proceedings of the 22nd Italian Symposium on Advanced Database Systems (SEBD2014), Discussion Paper

#### Abstract Reviewed Articles

- 2022 S. Y. Lee and A. De Santo. A computational view into the structure of attachment ambiguities in Chinese and Korean. Proceedings of NELS 52.
- 2019 A. De Santo and J. E. Drury. Encoding and Verification Effects of Generalized Quantifiers on Working Memory. Proceedings of the 55th meeting of the Chicago Linguistics Society (CLS 55). Chicago, IL.
- 2018 **A. De Santo**, J. Rawski, A. Yazdani, and J. E. Drury. *Quantified Sentences as a Window into Prediction and Priming: An ERP Study*. Proceedings of the 54th meeting of the Chicago Linguistics Society (CLS 54). Chicago, IL. 2018.
- 2017 A. Aksënova and A. De Santo. Strict Locality in Morphological Derivations. Proceedings of the 53rd Chicago Linguistic Society (CLS 53). Chicago, IL. 2017.

## Manuscripts

- Under P. Cepeda, A. Antonenko, M. Aronoff, R. Christianen, A. De Santo, J. Jaiswal,
- Review J. Y. Kim, M. Mayro, V. Miatto, Veronica, and L. Repetti. *Developing an Online Linguistics Gen Ed Course*. (Revise and Resubmit)
- In prep. A. De Santo and S. Y. Lee. Online Evidence for Pseudo-Relatives' Effects in Italian RC Attachment Resolution.
- In prep. G. Baggio, A. De Santo, N. A. Nunez. Minimal plausibility, community and early theory in Cognitive Science.
- In prep. R. Fusaroli, A. De Santo, O. Guest, V. Brasao, M. Woensdregt, F. Adolfi, S. Todorovikj, AQ. Vermillet, T. Hartley, I. van Rooij, J. Skewes. *Building theories is hard: a practice-based perspective on teaching how to theorise*.
- In prep. D. Levenstein, J. Rawski, **A. De Santo**, S. Heijnen, F. Oude Maatman, M. Narayan, C. Wright. *How do theoretical virtues depend on their problem-space?*.

#### Talks and Posters

## (for co-authored talks: \* personally presented)

- Upcoming C. L. Jacobs, **A. De Santo**, L. Grobol. Online and offline processing in zeugma constructions is insensitive to argument order. Poster at the 36th Annual Conference on Human Sentence Processing (aka CUNY). March 9-11, 2023
  - M. Fiorini, J. Chang, **A. De Santo**. A Minimalist Parsing Analysis of Subject/Object Asymmetries in Basque Relative Clauses. Poster at the 36th Annual Conference on Human Sentence Processing (aka CUNY). March 9-11, 2023
  - D. Del Valle and **A. De Santo**. A Minimalist approach to the processing of postverbal subjects in French relative clauses. Poster at the 36th Annual Conference on Human Sentence Processing (aka CUNY). March 9-11, 2023
  - 2022 M. H. Vu, **A. De Santo**, and H. Dolatian. *Logical Transductions for the Typology of Ditransitive Prosody*. Talk at SIGMORPHON 19th (2022). Seattle July 14, 2022.

- A. De Santo \* and S.Y. Lee Pseudo-relative clause effects on the online processing of Italian relative clause attachment. Poster at the 35th Annual Conference on Human Sentence Processing, to be held virtually from Thursday, 24th March, 2022 to Saturday, 26th March, 2022 (held online).
- S.Y. Lee and **A. De Santo** Online processing effects of Pseudo Relative Clause Availability in Italian Attachment Ambiguity. Talk at PLC 46, 2022 (held online).
- **A. De Santo\*** and S.Y. Lee. *Evaluating Structural Economy Claims in Relative Clause Attachment*. Talk at the Society for Computation in Linguistics. Held virtually Feb 7-9, 2022.
- S.Y. Lee and **A. De Santo** Connecting Sentence Processing and Syntactic Theories in Prenominal Relative Clause Languages. Talk at the 96th LSA Annual Meeting, held January 6-9, 2022 in Washington, DC.
- **A. De Santo\*** and S.Y. Lee. Evaluating Theories of Attachment Preference Computationally. Poster at the 96th LSA Annual Meeting, held January 6-9, 2022 in Washington, DC.
- 2021 S.Y. Lee and **A. De Santo\*** A Computational View into the Structure of Attachment Ambiguities in Chinese and Korean. Poster at NELS 52, Rutgers (Held online).
  - H. Dolatian, A. De Santo\* and T. Graf. Recursive Prosody is not Finite State. Talk at SIGMORPHON 18th (2021). To be held virtually August 5, 2021.
  - **A. De Santo** Feature Reactivation in Minimalist Parsing. Short Talk at the 34 Annual CUNY Conference on Human Sentence Processing, March 04-07 2021, UPenn (held online).
  - A. De Santo\* and A. Aksënova. Learning Interactions of Local and Non-Local Phonotactic Constraints from Positive Input. Talk at the Society for Computation in Linguistics (SCiL) 2021. Held virtually February 15-19, 2021
  - **A. De Santo.** A Minimalist Approach to Facilitatory Effects in Stacked Relative Clauses. Poster at the Society for Computation in Linguistics (SCiL) 2021. Held virtually February 15-19, 2021
- Antonio Galli, Vincenzo Moscato, Giancarlo Sperli, and A. De Santo. An Explainable Artificial Intelligence Methodology for Hard Disk Fault Prediction.
   Talk at the 2020 International Conference on Database and Expert Systems Applications (DEXA2020). Held virtually September 14-17, 2020
  - **A. De Santo** A Minimalist Parsing Account of Gradience in Acceptability Judgments. Poster at the 33rd Annual CUNY Conference on Human Sentence Processing, March 19-21 2020, UMass Amherst (held online).
  - Andrei Antonenko, Mark Aronoff, Paola Cepeda, **A. De Santo**, and Lori Repetti. The world turned upside-down: flipping the classroom in a large linguistics lecture course. Talk at the LSA symposium on Teaching Large General Linguistics Classes, Jan. 1-5 2020, New Orleans, Louisiana.
  - **A. De Santo**. MG Parsing as a Model of Gradient Acceptability in Syntactic Islands. Poster at the Society for Computation in Linguistics (SCiL) 2020, Jan. 1-5 2020, New Orleans, Louisiana.

- 2019 T. Graf and A. De Santo\*. Sensing Tree Automata as a Model of Syntactic Dependencies. Talk at the 16th Meeting on the Mathematics of Language (MOL), July 18-19 2019, Toronto, Canada.
  - **A. De Santo\*** and T. Graf. Structure Sensitive Tier Projection: Applications and Formal Properties. Talk at the 24st Conference on Formal Grammar (FG). August 11th 2019, Riga, Latvia.
  - A. De Santo. Testing a Minimalist Grammars Parser on Italian Relative Clause Asymetries. Talk at the Cognitive Modeling and Computational Linguistics Workshop (CMCL), June 7, 2019, Minneapolis, Minnesota
  - J. Rawski, A. De Santo, T. Graf, and J. Heinz. Geometric Representations of Linguistic Structures and Computations. Talk at the 52nd Annual Meeting of the Society for Mathematical Psychology, July 19-22, Montreal, Canada.
  - **A. De Santo**. The Processing of Italian Relative Clauses within a Computational Parsing Model. Poster at the 49th Linguistic Symposium on Romance Languages (LSRL49), May 1-4 2019, Athens, Georgia.
  - **A. De Santo** and Nazila Shafiei. On the Structure of Relative Clauses in Persian: Evidence from Computational Modeling and Processing Effects. Talk at the 2nd North American Conference in Iranian Linguistics (NACIL2), April 19-21 2019, University of Arizona.
  - **A. De Santo\*** and John E. Drury. *Generalized Quantifiers and Working Memory: Disentangling Encoding from Verification*. Poster at the 32nd Annual CUNY Conference on Human Sentence Processing, March 28-31 2019, Boulder, Colorado.
  - **A. De Santo**. Evaluating a Minimalist Grammar Parser on Italian Relative Clause Asymmetries. Poster at the 32nd Annual CUNY Conference on Human Sentence Processing, March 28-31 2019, Boulder, Colorado.
  - Nazila Shafiei and **A. De Santo\***. What Processing and Computational Modeling Can Tell Us about Syntax: The Case of Persian Relative Clauses. Poster at the 32nd Annual CUNY Conference on Human Sentence Processing, March 28-31 2019, Boulder, Colorado.
  - Andrei Antonenko, Mark Aronoff, Paola Cepeda, **Aniello De Santo\***, and Lori Repetti. *Classroom? We don't need no classroom to do linguistics!* Talk at CELT Annual Teaching and Learning Colloquium, March 8 2019, Stony Brook University.
  - K. McMullin, A. Aksënova, and **A. De Santo**. Learning phonotactic restrictions on multiple tiers. Talk at the Society for Computation in Linguistics (SCiL) 2019, New York City, NY.
- 2018 T. Graf, A. Aksënova, H. Baek, A. De Santo \*, H. Dolatian, S. Moradi, J. Rawski, S. Yang, and J. Heinz. Tiers and Relativized Locality Across Language Modules. Parallels Between Phonology and Syntax Workshop. Amsterdam, Meertens Instituut, July 9, 2018

- Aniello De Santo<sup>\*</sup>, J. Rawski, A. Yazdani, and J. E. Drury. *Quantified Sentences as a Window into Prediction and Priming: An ERP Study*. Talk at CLS 54, April 26-28 2018, Chicago, IL.
- **A. De Santo**. Extending TSL to Account for Interactions of Local and Non-Local Constraints. Poster at the Society for Computation in Linguistics (SCiL) 2018, Salt Lake City, Utah, January 4–7, 2018.
- 2017 A. De Santo\*, J. Rawski, and J. E. Drury. ERP effects for quantifier complexity, priming, and truth-value in an auditory/visual verification task. Poster at the Society for the Neurobiology of Language (SNL) 2017, Baltimore, Maryland.
  - J. Rawski, A. De Santo\*, and J. Heinz. Reconciling Minimum Description Length with Grammar-Independent Complexity Measures. Poster at MIT Workshop on Simplicity in Grammar Learning, September 23, 2017.
  - **A. De Santo\***, T. Graf, and J. E. Drury. Evaluating Subregular Distinctions in the Complexity of Generalized Quantifiers. Talk at ESSLLI 29th's Workshop on Quantifiers and Determiners (QUAD 2017), July 17 21, Toulouse, France.
  - **A. De Santo**. One class to rule them all? A study of TSL languages motivated by typological outliers. Poster presented at PLC 41, March 24-25 2017, Philadephia, PA
- 2016 A. De Santo. A game of tiers: Exploring the formal properties of TSL languages. Computational Phonology Workshop at Stony Brook University, December 16, 2016, Stony Brook, NY
  - **A. De Santo**\*, A. Aksënova, and T. Graf. *An Alternate View on Strong Lexicalization in TAG*. 12th International Workshop on Tree-Adjoining Grammars and Related Formalisms (TAG+) 2016, June 29 July 1, 2016, Düsseldorf
  - T. Graf, A. Aksënova, and **A. De Santo**. A Single Movement Normal Form for Minimalist Grammars. (with T. Graf, A. Aksënova). 21st Conference on Formal Grammar (FG-2016)
- 2015 F. Colace, M. De Santo, A. De Santo<sup>\*</sup>, A. Picariello. Connecting Times: Using Smart Technologies For Enhancing Ancient Downtowns Experience. 3rd International Conference of Information and Communication Technology (ICoICT 2015), May 27-29, 2015, Bali, Indonesia
  - F. Amato, A. De Santo, V. Moscato, A. Picariello, D. Serpico and G. Sperlí. A lexicon-grammar based methodology for Ontology population in e-health applications. 9th International Conference on Complex, Intelligent, and Software Intensive Systems (CISIS 2015)
  - F. Amato, **A. De Santo**, F. Gargiulo, V. Moscato, F. Persia, A. Picariello and S. R. Poccia. *SemTree: an index for supporting semantic retrieval of documents*. IEEE DESWeb ICDE 2015
  - F. Amato, **A. De Santo**, F. Gargiulo, V. Moscato, F. Persia, A. Picariello and G. Sperlí. *A novel approach to query expansion based on semantic similarity measures.* 4th International Conference on Data Management Technologies and Applications (DATA 2015)

- F. Amato, A. De Santo, V. Moscato, F. Persia, S. R. Poccia and A. Picariello. *Partitioning of ontologies driven by a structure-based approach*. IEEE 9th International Conference on Semantic Computing (ICSC2015)
- F. Amato, **A. De Santo**\*, V. Moscato, F. Persia, A. Picariello, S. R. Poccia, G. Sperlí. *A structure-based approach for ontology partitioning.* SEBD 2015: 184-191
- 2014 F. Amato, A. De Santo, V. Moscato, F. Persia and A. Picariello. *Detecting unexplained human behaviors in Social Networks*. IEEE Eight International Conference on Semantic Computing (ICSC2014)
  - F. Persia, F. Amato, F. Gargiulo, S. R. Poccia, and **A. De Santo**\*. Finding unexplained human behaviors in Social Networks. 22nd Italian Symposium on Advanced Database Systems

## Invited Talks

2022 Symbolic Parsers as Models of Sentence Processing: A Minimalist Perspective. Computational Linguistics Certificate Seminar. UNC Chapel Hill. October, 2022.

Mathematical Linguistics and Cognitive Complexity. Language Acquisition and Language Processing Lab, Norwegian University of Science and Technology. May 24, 2022.

The Devil is in the Details (of the Linking Theory). Linguistics Seminar Series, Department of Linguistics, University of Illinois at Urbana-Champaign. April 18, 2022.

Bridging Typology and Learnability via Formal Language Theory. CU Boulder's CompSem Meeting. February 23, 2022.

2021  $\it Mathematical Linguistics and Typological Complexity. SIGTYP Lecture Series . November 19th, 2021.$ 

A Pedagogical Necessity: On the Role of Domain Expertise in the Age of Black Box Models. Panel Talk at the University of Utah's AI and Society Symposium. September 19-20, 2021.

Minimalist Parsing as a Psycholinguistic Model. NETS — IUSS Pavia Center For NeuroCognition, Epistemology, and Theoretical Syntax. March, 2021.

Minimalist Parsing as a Psycholinguistic Model. MIT Discussion Group on Language and Computation. March, 2021.

Subregular Complexity as a Cognitive Hypothesis. Seminar series. Dept. of Communication Sciences and Disorders. University of Utah. November, 2020.

Minimalist Parsing as a Psycholinguistic Model. Yale's Friday Lunch Talk Series, Yale University. October, 2020.

Bridging Minimalist Syntax and Sentence Processing via Transparent Computational Models. Integrated Language Science and Technology Seminar (ILST), University of Pennsylvania. September, 2020.

MG parsing as a window into human sentence processing. Department of Linguistics, UCLA. February, 2020.

Parsing as a window into human sentence processing. Department of Linguistics, San Jose State University. January, 2020.

Of Parsers and Trees: Memory usage as a measure of complexity in human sentence processing. Department of English, Miami University (OH). January, 2020.

Memory usage as a measure of structural complexity in Minimalist parsing. Department of Linguistics, University of Utah. January, 2020.

- 2019 Memory usage as a measure of structural complexity in Minimalist parsing. Computation and Psycholinguistics Lab, Department of Cognitive Science, Johns Hopkins University. October 30, 2019.
- 2017 n-Gram Models of Morphological Derivations. Invited Poster. Institute for Advanced Computational Sciences (IACS)'s Five-Year Review, September 7, 2017, Stony Brook University, Stony Brook, NY. (A. Aksënova)
- 2016 What the Dialects can teach us about Italian: the case of Irpino, Richard Nasti Lecture Series, Stony Brook University Center for Italian Studies, October 4, 2016. (Repeated on February 2017)

# Invited Participation in Workshops

2022 What Makes a Good Theory? Interdisciplinary Perspectives, Lorentz Center (Hybrid), Leiden, The Netherlands, 20 - 24 June, 2022.

## Grants

• Research Incentive Seed Grant, University of Utah. March 2021 to March 2023. Title: Testing Subregular Constraints on the Learnability of Morphotactics.

# Scholarships and Awards

- Stony Brook University 2019/2020 Graduate Fellowship in the Arts, Humanities and Lettered Social Sciences.
- CMCL Student Travel Award. Sponsored by the French National Centre for Scientific Research (CNRS), April 2019.
- CUNY Student Travel Award. 32nd CUNY Human Sentence Processing Conference, University of Colorado Boulder, March 2019.
- Department of Linguistics Travel Award. Stony Brook University, December 2018.
- Institute for Advanced Computational Science (IACS) Travel Award. Stony Brook University, July 2018.
- Department of Linguistics Travel Award. Stony Brook University, December 2017.
- Sigma Xi Travel Award for Excellence in Research. Stony Brook University, May 2017.
- Department of Linguistics Travel Award. Stony Brook University, December 2016.

- Travel Grant to conduct field work in Irpinia (Italy), on a project about Raddoppiamento fonosintattico in the Irpino Dialect. Awarded by the *Center for Italian Studies*, Stony Brook University, June 2016.
- Research Scholarship on the project Networks of Excellence EMBEDDED SYSTEMS in Critical Domains, Università degli Studi Federico II di Napoli, Rif. Borsa DIETI 30/2014
- Research Scholarship on the project SmartHealth Methodologies for natural language processing in clinical applications, Università degli Studi Federico II di Napoli, RIF. DIETI 47/2014

## Teaching

#### Independent Studies

- Spring 2022 Advanced Syntax. Brennan Wednesdey (UG), U. of Utah
- Spring 2021 Computational Models of Phonological Learning. Mohammed Al-Ariqy (Grad), U. of Utah

#### As an Instructor

- Spring 2023 Introduction to Computational Linguistics (LING 5300) U. of Utah. UG Course
  - Fall 2022 Computers & Language (LING 3300) U. of Utah. UG Course
- Spring 2022 Introduction to Syntax (LING 4020) U. of Utah. UG Course
- Spring 2022 Introduction to Computational Linguistics (LING 5300) U. of Utah. UG Course
  - Fall 2021 Syntax 1 (LING 6021) U. of Utah. Grad Course
  - Fall 2021 Computers & Language (LING 3300) U. of Utah. UG Course
- Spring 2021 Introduction to Computational Linguistics (LING 5300) U. of Utah. UG Course
  - Computational Linguistics (LING 6300) U. of Utah. Grad Course
  - Fall 2020 Fundamentals of Python (LING 5981/6080) U. of Utah. UG/Grad Course
- Spring 2020 Computational Linguistics (LIN220) Stony Brook University.
  - Fall 2019 Language and Technology (LIN120) Stony Brook University.
- Sum. 2019 Bilingualism (LIN541/426) Stony Brook University.
- Spring 2019 Language and Technology (LIN120) Stony Brook University. co-Instructor (two sections, co-taught with Alëna Aksënova)
- Sum. 2018 Language in the USA (LIN200) Stony Brook University.
- Winter 2017 Language and Life in Italy (LIN356) Stony Brook University.
- Sum. 2016 Language and Technology (LIN120) Stony Brook University.
  - As a Teaching assistant (TA)
  - Fall 2017 Language and Technology (LIN120) Stony Brook University. Instructor: Thomas Graf

- Spring 2017 **Language and Mind (LIN426)** Stony Brook University. Instructor: John E. Drury
  - Fall 2016 Language and Technology (LIN120) Stony Brook University. Instructor: Thomas Graf
- Spring 2016 Language and Speech Disorders (LIN380) Stony Brook University.
  Instructor: Joseph Hoffman
  - Fall 2015 Language and Technology (LIN425) Stony Brook University. Instructor: Thomas Graf
- Spring 2015 **Multimedia Systems and Applications** Università degli Studi Federico II di Napoli. Instructor: Antonio Picariello
  - Fall 2014 Foundations of Computer Science Università degli Studi Federico II di Napoli. Instructor: Antonio Picariello
  - Fall 2014 Introduction to Data Base Systems Università degli Studi Federico II di Napoli. Instructor: Vincenzo Moscato

Guest Lectures

- 05/04/2022 Computational Psycholinguistics: A Primer. In *Introduction to Natural Language Processing* (Instructor: Dr. Jon Rawski). San Jose State University, Dept. of Linguistics and Language Development
- 11/01/2021 Artificial Grammar Learning and Formal Language Theory. In Formal Language Theory in Linguistics (Instructor: Dr. Mai Ha Vu). University of Oslo, Oslo, Norway

Other

Sum. 2020 **Computational Linguistics.** Course at the 18th annual New York - St. Petersburg Institute of Linguistics, Cognition and Culture (V-NYI). Co-taught with T. Graf, Alena Aksenova, Jeff Heinz. Held Virtually 07/13/2020 - 07/31/2020

# Student Mentoring

Thesis Committee Chair

2021-pres. Daniel Del Valle (MA, expected Spring 2023).

Thesis Committee Member

- 2021-2022 Maridon Romney (MA, graduated Spring 2022).
- 2021-pres. Mary Akbary (PhD, expected Spring 2025).
- 2022-pres. Leigh Anne Benzaia (PhD, expected Spring 2026).
- 2022-pres. Eunjin Lee (PhD, expected Spring 2026).
- 2022-pres. Yan Shi (PhD, expected Spring 2026).

#### Undergraduate Mentoring

Fall 22-pres. Britta Anne Bolander (Linguistics/Philosophy of Science; Undergraduate Research Opportunities Program recepient for Spring 2023). Project: Bridging the Ethics Divide: Expanding the Scope and Context of AI Ethics (co-menthored with J. C. Havstad)

- Sum. 22-pres Andrea Esteffany Gutierrez (Linguistics; UG Honors Thesis). Project: Testing
  Mathematical Predictions on Phonotactics with AGL experiments
- Sum. 22-pres Jacob Johnson (Linguistics/Computer Science). Project: Developing and Testing Grammar Induction Algorithms for Multiple-Input TSL Languages
- Sum. 22-pres Casey Miller (Linguistics/Computer Science; Undergraduate Research Opportunities Program recepient for Fall 2022). Project: Mathematical Models of Tone in Thai Reduplication Patterns

#### Other

Spring/Sum. PhD Dissertation Reader, Heming S. Bremnes, NTNU (Norway). Quantifiers 2022 and Complexity: The distinct neural signatures of verification algorithms for natural language quantifiers.

#### Other Positions

- 01/2018 Graduate Assistant. Stony Brook University. PIs: Andrei Antonenko, Mark 01/2019 Aronoff, Lori Repetti

  S. ROLD (Stony Brook Online Learning Development) Project: convert SBII linguistics.
  - S-BOLD (Stony Brook Online Learning Development) Project: convert SBU linguistics' largest general education course (LIN 200 Language in the USA) to an online format.
- 05/2014 Research Assistant DIETI, Università degli Studi Federico II di Napoli
- 08/2015 I worked on statistical models, formal languages, NLP techniques, game theory and graph theory applied to social networks analysis, big data analytics, semantic analysis.
- 09/2013- Research Internship LABADAM, Università degli Studi Federico II di Napoli
- 02/2014 Supervisor: Prof. Antonio Picariello. Main Advisor: Prof. Virginio Cantoni I developed statistical models for the detection of unexplained user behaviors in online social networks.
- 02/2012- Research Internship Identification and Control of Dynamic Systems (ICDS)
- 09/2012 Laboratory, Università degli Studi di Pavia Main supervisor: Prof. Lalo Magni I worked on models for the automatic control of glycaemia in Type I Diabetes, within the AP@Home Project sponsored by the Juvenile Diabetes Research Foundation.

#### Additional Education

- 07/2017 **29th European Summer School in Logic, Language, and Information** (ESSLLI) University of Toulouse (France) 7–28 July, 2017
- 10/2016 **Online Education Symposium** Stony Brook University October 21, 2016, Stony Brook, NY

## Service

Reviewing HSP/CUNY (2022, 2023); Applied Psycholinguistics (2022); Queer in AI @ NAACL (2022); SIGMORPHON (2022); EMNLP (2021, 2022); Nordic Journal of Linguistics (2021, 2022); CoNLL (2020-2022); CMCL (2019-2022); SCiL (2020-2022); Glossa (2021); Language, Cognition and Neuroscience (2021); SACNAS National Diversity in STEM (NDiSTEM) Digital Conference (2021); EACL (2021); COLING (2020); Biolinguistics (2017, 2018); SYNC (2016-2018)

To U. of Executive Committee (2021-present); Undergraduate Student Committee (2020-Utah present); Department Library Liaison (2022-present); Computational Linguistics Certificate Coordinator (2020-present); College of Humanities' Diversity Equity and Inclusion Task Force (2021-present); NACLO Outreach and Planning (2020-present); Colloquium Committee (2020-2021); EDI Curriculum Committee (2020-2021); EDI Outreach Committee (2020-2021); Ad hoc Learning Outcomes Committee (2021)