John Murzaku

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EDUCATION

Feb. 2021 - Present	Stony Brook University GPA: 3.83/4.0	Ph.D. Candidate in Computer Science Advisor: Owen Rambow
Aug. 2017 - Dec. 2020	Seton Hall University GPA: 3.83/4.0	B.S. in Mathematics Minor: Catholic Studies

RESEARCH EXPERIENCE

May 2022 - Present	**Source and Target Belief Modelling** *Stony Brook University. Advised by Owen Rambow* Creating novel machine-learning techniques for modelling belief/event factuality among multiple sources and targets in text. Combining factuality and fine-grained sentiment analysis corpora.
Aug. 2021 - May 2022	**Author-Only Belief Modelling [2]** *Stony Brook University. Advised by Owen Rambow* Corrected a label projection error in widely-used previous versions of the FactBank corpus. Developed new techniques for the author-only event factuality prediction task, providing state-of-the-art results on four event-factuality corpora. Offered a new evaluation scheme for the event-factuality prediction task.
Feb. 2021 - Aug. 2021	**Probabilistic Graph Models for Injury Risk Quantification** *Stony Brook University. Advised by Shubham Jain* Created LiftSafe, a Hidden Markov Model to continuously quantify injury risk during resistance training workouts.
Feb. 2021 - Aug. 2021	**Mobile Sensing for Cardiac Rehabilitation** *Stony Brook University. Advised by Shubham Jain* Developed a Fitbit application to collect and analyze vital metrics during resistance training workouts for cardiac rehabilitation patients in collaboration with Stony Brook Renaissance School of Medicine.

INTERN EXPERIENCE

May 2020 - Sep. 2020	Developer @ Google Summer of Code Developed traviz, a general purpose trajectory analytics package in R to store, visualize, and analyze trajectory data
Aug. 2018 - Dec. 2018	Data Analyst Intern @ The Burr Project Performed statistical analysis in Python on United States voter data and scraped voter data to fit a NoSQL database

AWARDS

BIAS-NRT Fellowship, $68,000 (2022-2024) Selected as a fellow for The NSF Research Traineeship project on detecting and addressing bias in data, humans, and institutions at Stony Brook University

Stony Brook Inclusive Computing Fellowship, $2000 (2022) One of six computer science Ph.D. students selected to help broaden inclusivity in computing and aid in teaching assistant training

IACS Young Writer's Award, $500 (2022) Selected by faculty for the Stony Brook Institute of Advanced Computational Science Young Writer's Award.

PUBLICATIONS

[2] **John Murzaku**, Peter Zeng, Magdalena Markowska, Owen Rambow. "Re-Examining Factbank: Predicting the Author's Presentation of Factuality". COLING 2022 (Oral presentation). PDF

[1] T. Chu, L. Lee, A. Yussof, S. Lopez, G. Herrera, P. Luna, M. Uddin, L. Wu, **J. Murzaku**, D. Dickinson, and S. Hsu, "Enhanced sporicidal activity of alcohol and epigallocatechin-palmitate-based hand hygiene formulations comprised of plant-derived compounds." Journal of Biosciences and Medicines (2020), PDF.

SKILLS

Languages: Python, R, Javascript

Tools: PyTorch, TensorFlow, MongoDB, Fitbit OS, Firebase, Docker

Foreign Languages: Albanian (full proficiency), German (intermediate), Italian (intermediate), French (intermediate)