

WILLIAM GANTT

wgantt.iv@gmail.com \diamond wgantt.github.io \diamond github.com/wgantt

EDUCATION

University of Rochester, M.S., Ph.D. Computer Science

Anticipated Spring 2024

- Advisor: Aaron Steven White
- Coursework: *Machine Learning, Machine Vision, Statistical Speech and Language Processing, Deep Learning, Data Management Systems, Semantic Analysis, Formal Semantics, Syntactic Theory, Computational Complexity, Programming Languages, Design and Analysis of Efficient Algorithms*

Bowdoin College, B.A. Computer Science (honors), *cum laude*, Phi Beta Kappa

May 2017

- Advisors: Clare Bates Congdon and Stephen Majercik
- Thesis: *An Investigation of Genetics-Based Machine Learning as Applied to Global Crop Yields*
- Coursework: *Robotics, Optimization and Uncertainty, Introduction to Systems, Computer Networks, GIS Algorithms & Data Structures, Databases, Algorithms, Data Structures, Introduction to Computer Science, Linear Algebra, Statistics, Probability, Mathematical Reasoning, Multivariate Calculus*

INTERESTS

Natural language understanding, information extraction, machine learning

EXPERIENCE

Microsoft - Semantic Machines

Summer 2022

Research Intern

Remote

- Investigated and implemented techniques for calibration and constrained decoding for few-shot semantic parsing using large autoregressive language models (GPT-3, Codex); improved top- k parsing accuracy by several points absolute on multiple datasets.

Okta

July 2017 - July 2019

Software Engineer

San Francisco, CA

- Led development on Okta's [authentication and authorization pipeline](#) by developing new policy and HTTP callbacks frameworks.
- Developed an out-of-the-box self-service registration platform for web apps.

SERVICE

Teaching and Mentoring

Teaching Assistant

- Spring 2021: *Machine Learning* (CSC 246/446)
- Fall 2020: *Statistical Speech and Language Processing* (CSC 248/448)
- Spring 2020: *Machines and Consciousness* (CSC 191/291)

Reviewing

- Summer - Fall 2022: EMNLP 2022
- Fall 2021 - Winter 2022: ACL Rolling Review (ad-hoc)
- Spring 2021: NAACL-HLT 2021 (emergency)

PUBLICATIONS

- Yunmo Chen, **William Gantt**, Weiwei Gu, Tongfei Chen, Aaron Steven White, Benjamin Van Durme. Iterative Document-Level Information Extraction via Imitation Learning. 2022. *Under Review*.
- **William Gantt**, Lelia Glass, Aaron Steven White. 2022. [Decomposing and Recomposing Event Structure](#). *Transactions of the Association for Computational Linguistics (TACL)*.

- Benjamin Kane, **William Gantt**, Aaron Steven White. 2021. [Intensional Gaps: Relating doxasticity, bouleticity, veridicality, factivity, and neg-raising](#). *Semantics and Linguistic Theory (SALT 31)*.
- **William Gantt**, Benjamin Kane, Aaron Steven White. 2020. [Natural Language Inference with Mixed Effects](#). *The Ninth Joint Conference on Lexical and Computational Semantics (*SEM)*.

PROJECTS AND DATA

[Decompositional Semantics Initiative](#)

- Dataset and toolkit for commonsense semantic annotations and semantic graphs on top of Universal Dependencies on the English Web Treebank.
- Co-lead developer on version 2.0 of the Decomp Toolkit.
- Lead author of UDS-EventStructure dataset.

[MegaIntensionality](#)

- Lexicon-scale dataset of lexically-triggered belief and desire inferences across 725 English clause-embedding verbs. Part of the MegaAttitude project.

[IARPA BETTER](#)

- Multilingual information extraction (IE) and retrieval (IR) competition funded by IARPA.
- One of the lead developers of the IE models for team led by Benjamin Van Durme's lab at Johns Hopkins.

HONORS & AWARDS

Sproull Fellowship

University of Rochester, September 2019

The University of Rochester's most prestigious graduate fellowship, awarded to fewer than a dozen incoming PhD students on the basis of an outstanding academic record and unusual potential for graduate study.

NSF Research Traineeship

University of Rochester, September 2019

Full-stipend one-year fellowship awarded to a small set of PhD students in Computer Science and Brain and Cognitive Sciences focused on computationally-oriented, interdisciplinary research training.

Computer Science Senior-Year Prize

Bowdoin College, May 2017

Awarded to the student who has achieved the highest distinction in the major program in computer science.

SKILLS

Programming Languages

Python (expert); Java (familiar);
R, MySQL, C, C++, Bash (some experience)

Tools & Libraries

NumPy, Pandas, PyTorch, Hugging Face, AllenNLP, AI2 Tango,
Amazon Mechanical Turk, L^AT_EX, Git, Vim