Alexander Miller

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Research Interests

I'm interested in structured prediction, probabilistic graphical models, and the development of machine learning methods which can integrate large amounts of data from heterogeneous sources. I'm particularly interested in applying machine learning methods that can leverage relational structure to problems in biology and medicine.

Academic History

University of California, Santa Cruz — **Santa Cruz, CA**

B.A., Computer Science — *September 2016 - March 2021*

- 3.88 cumulative GPA
- Dean's Honors 5 quarters

Ph.D., Computer Science — *September 2021 - Present*

- 3.67 cumulative GPA

Research Experience

LINQS Member — **Santa Cruz, CA**

LINQS — *June 2020 - Present*

- Conduct research under Professor Lise Getoor in collaboration with other LINQS members

LINQS Student — **Santa Cruz, CA**

LINQS Learning Lab — *September 2019 – May 2020*

- Studied the work being done at LINQS and the general field of statistical relational learning (SRL)
- Conducted research in this field alongside other LINQS Learning Lab students and LINQS members

Publications

Alex Miller, Naum Markenzon, Varun Embar, and Lise Getoor. "Collective Bio-Entity Recognition in Scientific Documents using Hinge-Loss Markov Random Fields." *International Workshop on Mining and Learning with Graphs (MLG)*. 2020.

Charles Dickens*, Connor Pryor*, Eriq Augustine, Alex Miller, and Lise Getoor. "Context-Aware Online Collective Inference for Templated Graphical Models." *International Conference on Machine Learning (ICML)*. 2021.

Charles Dickens, Alex Miller, and Lise Getoor. "Online Collective Demand Forecasting for Bike Sharing Services." *Hawaii International Conference on System Sciences (HICSS)*. 2023.

Skills

- Python, Pandas, Scikit-learn
- C++, C
- UNIX/Linux

Industry Experience

Software Development Intern **Campbell, CA**

Ourglass TV *June 2017 – July 2017*

- Developed applications with Node.JS and Angular 1.0 for out-of-home televisions.