

KEVIN ROS

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kevinros.github.io

EDUCATION

University of Illinois, Urbana-Champaign

September 2020 - Present

Ph.D. in Computer Science

Vassar College (GPA: 3.83)

September 2016 - May 2020

B.A. in Computer Science

B.A. in Mathematics

AWARDS

Saburo Muroga Endowed Fellowship

2020

University of Illinois, Urbana-Champaign

Awarded to outstanding graduate students in computer science.

Honorable Mention, 2020 Spring USRESP

2020

Vassar College

Undergraduate Statistics Research Project Competition.

Sigma Xi

2020

Vassar College

For research achievement and potential.

Departmental Honors

2020

Vassar College

Computer Science, Mathematics.

PUBLICATIONS

P. Naumov, K. Ros, Comprehension and Knowledge, 35th AAAI Conference on Artificial Intelligence (AAAI 21), February 2-9, 2021.

K. Ros, H. Olsson, J. Hu, Two-Phase Data Synthesis for Income: An Application to the NHIS, Privacy in Statistical Databases 2020, Tarragona, Catalonia, September 23-25, 2020.

P. Naumov, K. Ros, Strategic Coalitions in Systems with Catastrophic Failures (extended abstract), 16th International Conference on Principles of Knowledge Representation and Reasoning (KR 18), Tempe, Arizona, USA, October 30-November 2, 2018.

PRESENTATIONS

Comprehension and Knowledge, Virtual Presentation, 35th AAAI Conference on Artificial Intelligence (AAAI 21), February 5, 2021.

Two-Phase Data Synthesis for Income: An Application to the NHIS, Virtual Presentation, Electronic Undergraduate Statistics Research Conference, November 6, 2020.

Two-Phase Data Synthesis for Income: An Application to the NHIS, Virtual Presentation, Privacy in Statistical Databases 2020, Tarragona, Cataloni, September 23, 2020.

Replicating Bayesian Distributional Word Embeddings, Poster, Vassar College, Poughkeepsie, New York, USA, May 7, 2019.

Strategic Coalitions in Systems with Catastrophic Failures, Poster, 16th International Conference on Principles of Knowledge Representation and Reasoning (KR 18), Tempe, Arizona, USA, October 30 - November 2, 2018.

RESEARCH EXPERIENCE

Research Assistant August 2020 - Present
Primary Advisor: Dr. ChengXiang Zhai, University of Illinois, Urbana-Champaign Urbana, IL

Currently working to expand user queries relating to COVID-19 by leveraging various expansion techniques, such as pseudo-relevant feedback and word embeddings. Also investigating the ability of state-of-the-art sequence-to-sequence models for question summarization, specifically in the healthcare domain.

Undergraduate Thesis September 2019 - May 2020
Primary Advisor: Dr. Nancy Ide, Vassar College Poughkeepsie, NY

Topic: Using word embeddings from PubMed abstracts and literature-based discovery techniques to discover non-explicit relationships between mental illnesses and symptoms.

Undergraduate Research Assistant January 2019 - August 2020
Vassar College Poughkeepsie, NY

Worked with Dr. Nancy Ide and Keith Suderman to improve the document retrieval and ranking system for The Language Application Grid Question/Answer Service.

Independent Study September 2017 - Present
Vassar College Poughkeepsie, NY

Conducted research with Dr. Pavel Naumov to study soundness and completeness properties of multi-agent axiomatic systems with a probabilistic aspect. This work has led to three articles, listed in the "Publications" section below. Currently focusing on knowledge and comprehension in multi-agent systems.

REU Summer Research Program May 2019 - September 2019
Vassar College, funded by NSF Poughkeepsie, NY

Worked with Dr. Nancy Ide and Keith Suderman to optimize The Language Application (LAPPS) Grid Question/Answer service with RabbitMQ and Docker. Implementation can be found at <http://services.lappsgrid.org/eager/ask>.

Independent Study September 2018 - December 2018
Vassar College Poughkeepsie, NY

Conducted research for Dr. Nancy Ide to extract information and trends from published geology research articles, specifically focusing on the relationships between mineral level and epochs.

TEACHING EXPERIENCE

TA, Introduction to Data Science May 2019 - August 2019
Vassar College (Liberal Arts Collaborative for Digital Innovation) Poughkeepsie, NY

Guided students through the foundations of data science while working closely with professors and other TAs to ensure that no student fell behind. Also aided in course material development, evaluation, and deployment.

EXTRACURRICULAR ACTIVITIES

Vassar Men's Volleyball Team

September 2016 - May 2020

AVCA All-American, 2020

Team Captain, 2018 - 2020