KEVIN ROS

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EDUCATION

University of Illinois, Urbana-Champaign   *Beginning September 2020*
Ph.D. in Computer Science (Data and Information Science)

Vassar College (GPA: 3.83)   *September 2016 - May 2020*
B.A. in Computer Science
B.A. in Mathematics

RESEARCH EXPERIENCE

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 - Present
Vassar College   *Poughkeepsie, NY*

Currently working 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, Introducion to Data Science   May 2019 - August 2019
Vassar College (Liberal Arts Collaborative for Digital Innovation)   *Poughkeepsie, NY*

Guided students with little mathematics experience 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.

PUBLICATIONS

P. Naumov, K. Ros, Logic of Knowledge and Comprehension. Submitted for publication.

P. Naumov, K. Ros, Strategic Coalitions in Stochastic Games, arXiv:1910.04489. Submitted for publication.

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

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.

PROJECTS

Replicating Bayesian Word Embeddings   March 2019 - June 2019
Vassar College, Bayesian Statistics (MATH 347)   *Poughkeepsie, NY*

Replicated and verified the results of a word embedding method which implemented the Bayesian Skip-Gram method to generate the word vectors. The final paper can be found here: https://kevinros.github.io/pub/2018bayesian.pdf

Database of Line Arrangements   May 2018 - August 2018
Vassar College   *Poughkeepsie, NY*

Built a front-end and back-end for a database of 11-dimensional line arrangements, using HTML/CSS, PHP, and MySQL.

TECHNICAL STRENGTHS

Computer Languages	Python, JAVA, R, C, PHP
Databases	MySQL
Tools	LaTeX, Emacs, RabbitMQ, Docker, Springboot

AWARDS

Sigma Xi   2020

For research achievement and potential.

Departmental Honors   2020

Computer Science, Mathematics.

EXTRACURRICULAR ACTIVITIES

Vassar Men's Volleyball Team   September 2016 - May 2020

AVCA All-American, 2020
Team Captain, 2018 - 2020