Parker Seegmiller

Hanover, NH 03755 (385) 219-8093 • pkseeg.gr@dartmouth.edu pkseeg.com

Education

PhD Computer Science, Dartmouth College, Hanover, NH

September 2021 - Present

Awards: Guarini PhD Innovation Fellow, Guarini School Graduate Student Poster Session 2023 Winner Relevant Coursework: Artificial Intelligence, Machine Learning, Natural Language Processing, Entrepreneurship and Innovation, Accounting, Finance

BS Statistics: Data Science, Brigham Young University, Provo, UT

Minor in Computer Science, Minor in Mathematics

August 2017 - April 2021

Relevant Coursework: Deep Learning, Artificial Intelligence, Machine Learning, Natural Language Processing, Big Data Science, Inferential Statistics, Algorithms, Advanced Programming, Data Structures, Discrete Structures, Computation Theory, Probability, Advanced Linear Algebra, Calculus, Competitive Programming

Publications

- Seegmiller, P. & Preum, S. (In Press). (2023). Statistical Depth for Ranking and Characterizing
 Transformer-Based Text Embeddings. The 2023 Conference on Empirical Methods in Natural Language
 Processing (EMNLP 2023).
- Gatto, J., Sharif, O., Seegmiller, P., Bohlman, P., & Preum, S. (In Press). (2023). Text Encoders Lack Knowledge: Leveraging Generative LLMs for Domain-Specific Semantic Textual Similarity. The 2023 Conference on Empirical Methods in Natural Language Processing (GEM Workshop 2023) (EMNLP 2023).
- Seegmiller, P., Gatto, J., Basak, M., Cook, D., Ghasemzadeh, H., Stankovic, J., & Preum, S. (In Press). (2023). The Scope of In-Context Learning for the Extraction of Medical Temporal Constraints. The 6th International Workshop on Health Natural Language Processing (HealthNLP Workshop 2023) (ICHI 2023).
- Seegmiller, P., Gatto, J., Johnston, G., Basak, M., & Preum, S. (2023). HealthE: Recognizing Health Advice & Entities in Online Health Communities. International AAAI Conference on Web and Social Media (ICWSM 2023).
- Gatto, J., Seegmiller, P., Johnston, G., & Preum, S. (2022). Identifying the Perceived Severity of Patient-Generated Telemedicine Queries Regarding COVID: Developing and Evaluating a Transfer Learning Based Solution. 2022 Journal of Medical Internet Research.
- Masters, T., Nayakankuppam, D., Yu-Buck, G., & Seegmiller, P. (2022). Consumption as Therapy: Individual and Country Factor effects on Stress and Optimism During a Sustained Stressor [Paper Presentation]. 2022 AMA Winter Academic Conference, Las Vegas, Nevada, USA.

Experience

Teaching Assistant, Dartmouth College Department of Computer Science

September 2021 - Present

• *Courses Assisted:* Android Programming (Dr. Xing-Dong Yang, Fall 2021), Discrete Mathematics (Dr. Hsien-Chih Chang, Winter 2022), Machine Learning (Dr. Sarah Masud Preum, Spring 2022 & Fall 2023)

Data Science Intern, *Aetna, a CVS Health Company*

Analytics and Behavior Change - Payment Integrity Team June 2020 - August 2020

- Personally developed machine learning model for predicting healthcare provider abusive upcoding on inpatient DRG claims, projected to save up to \$1,000,000 each month via audit recommendations
- Presented original research for VP of Aetna, preparing web application for live model prediction
- Engineered 100+ features for abusive upcoding model

Research Assistant, Brigham Young University Marketing Department

May 2019 - May 2020

- Statistical researcher under Tamara Masters, Ph.D.
- Provided data modeling, analysis, insight, and creativity for 8 research projects

Research Assistant, Brigham Young University Statistics Department

September 2018 - April 2019

- Collected, managed, and analyzed 5+ years of match data for BYU women's and men's tennis teams
- Led team of 11 interns in data collection, project ideation, and statistical analysis processes
- Built and presented player-specific probabilistic models of serving percentages by service position and point outcome, presenting research insights to head coaches

Volunteer Work

Refugee Youth Mentor, Catholic Community Services of Utah

June 2019 - June 2020

- Met with newly-arrived (< 1 year in U.S.) teenage refugee for 2+ hours weekly, assisting in assimilation process via English tutoring, cultural activities, and mentorship
- Participated in quarterly trainings on topics ranging from English as a second language tutoring to comprehensive gang prevention

ESL Elementary School Reading Tutor, Granite School District

August 2018 - December 2018

• Tutored 10+ elementary school students ages 7-10 in reading and writing English as a second language

Skills

Programming: Python, Java, Kotlin, C++, SQL, R *Languages*: English (Native), Lithuanian (Advanced)

Methods: Natural Language Processing, Machine Learning, Statistical Inference