Gavin Kerrigan

6225 Adobe Circle Road South, Irvine, California 92617

gavin.k@uci.edu • +1 (215) 264-1256

EDUCATION

University of California, Irvine, Irvine, California

Ph.D. Computer Science — Sep 2019 –
- Advisor: Prof. Padhraic Smyth
- GPA: 4.0 / 4.0

The Pennsylvania State University, State College, Pennsylvania

B.Sc. Mathematics — Aug 2015 – May 2019
- GPA: 3.98 / 4.00 (*summa cum laude*)
- Schreyer Honors College
- Advisor: Prof. Daniel Kifer
- Honors Thesis: Estimating Noisy Histograms with Quality Guarantees

Minor: Physics

RESEARCH EXPERIENCE

University of California, Irvine, Irvine, California

Graduate Research Assistant, Department of Computer Science — Sep 2019 –
- Advisor: Professor Padhraic Smyth
- Fundamental machine learning research on uncertainty calibration and applications to effective human-AI interaction.

The Pennsylvania State University, State College, Pennsylvania

Undergraduate Research Assistant, Department of Computer Science — Dec 2018 – May 2019
- Advisor: Professor Daniel Kifer
- Investigated techniques for differentially private histogram publication with robust quality guarantees. Implemented algorithms in Python and performed rigorous empirical analyses.

Undergraduate Research Assistant, Department of Mathematics — Sep 2017 – Dec 2017
- Advisor: Professor Misha Guysinsky
- Conducted research in functional analysis in the Mathematics Advanced Study Semester program.

PUBLICATIONS

WORKSHOP ARTICLES

[1] **G. Kerrigan**, D. Slack, and J. Tuyls, "Differentially Private Language Models Benefit from Public Pre-training," *Private NLP*, EMNLP Nov 2020.

AWARDS & SCHOLARSHIPS

UC Irvine Dean's Award	2019
Recruitment scholarship awarded for outstanding research potential.	
Steve and Sherry McCrystal Award, The Pennsylvania State University	2019
Mary Lister McCammon Award, The Pennsylvania State University	2017, 2018
Awarded to outstanding undergraduates majoring in mathematics.	
Best Presentation Award, Mathematics Advanced Study Semester,	2017
Phi Beta Kappa	2017

OTHER WORK EXPERIENCE

Penn State Learning, State College, Pennsylvania

Peer Coordinator — Sep 2018 – May 2019
- Selected and interviewed candidates for tutoring positions, with a focus on increasing diversity in the applicant pool.
- Organized and led monthly training sessions for mathematics tutors to increase the educational efficacy of the team.

Mathematics Tutor — Jan 2017 – May 2019
- Tutored undergraduates in mathematics courses including college algebra, calculus, differential equations, and statistics.
- Developed content for and presented midterm exam review sessions in differential equations with more than 200 students in attendance, leading to a 95% positive feedback rate.

PROFESSIONAL SERVICE

Workshop Reviewing

Uncertainty & Robustness in Deep Learning, ICML — 2020