

Justin Lovelace

(512)964-9498

jlovelac@andrew.cmu.edu

Education	Carnegie Mellon University M.S. in Language Technologies	<i>August 2020-August 2022</i>
	Texas A&M University B.S. in Computer Science, Minor in Mathematics Honors Fellow, Engineering Honors, Undergraduate Research Scholar	<i>May 2020</i> GPA: 4.0
	Undergraduate Honors Thesis Predicting ICU Readmission with Clinical Notes (Outstanding Undergraduate Honors Thesis Award)	
Publications	J. Lovelace , B. Mortazavi, "Learning to Generate Clinically Coherent Chest X-Ray Reports" (Under Review)	
	J. Lovelace , N. Hurley, A. Haimovich, B. Mortazavi, "Dynamically Extracting Outcome-Specific Problem Lists from Clinical Notes with Guided Multi-Headed Attention" <i>Machine Learning for Healthcare Conference (MLHC)</i> , 2020.	
	J. Lovelace , N. Hurley, A. Haimovich, B. Mortazavi, "Mining Dynamic Problem Lists from Clinical Notes for the Interpretable Prediction of Adverse Outcomes" <i>ACM Conference on Health, Inference, and Learning Workshop</i> , 2020. (Oral Spotlight)	
	J. Lovelace , N. Hurley, A. Haimovich, B. Mortazavi, "Explainable Prediction of Adverse Outcomes Using Clinical Notes" <i>NeurIPS Machine Learning for Health Workshop</i> , 2019.	
Research Experience	Systems and Technology for Medicine and IoT Lab Undergraduate Researcher with Dr. Bobak Mortazavi (TAMU)	<i>April 2018-May 2020</i>
	<ul style="list-style-type: none">Developed convolutional attention models for the interpretable prediction of ICU readmission and patient mortality using clinical notes.	
	Sketch Recognition Lab Undergraduate Researcher with Dr. Tracy Hammond (TAMU)	<i>January 2017-May 2017</i>
	<ul style="list-style-type: none">Developed a machine learning model to predict users' personality traits based on their social media activity.	
Industry Experience	Facebook (Search) Software Engineering Intern	<i>May 2020-August 2020</i>
	<ul style="list-style-type: none">Developed a framework to onboard keywords to the search index in real time from a variety of sources (e.g. news articles).	
	Facebook (Notification Ranking) Software Engineering Intern	<i>May 2019-August 2019</i>
	<ul style="list-style-type: none">Implemented rate limiting service to protect Facebook's internal reachability service and its dependencies from unstable traffic.Developed machine learning model to extend reachability service from email to include SMS and demonstrated that the model can reduce the amount of undeliverable SMS sent by over half.	
	Raytheon Applied Signal Technology Software Engineering Intern	<i>May 2018-August 2018</i>
	<ul style="list-style-type: none">Developed python scripts to automate testing procedures across multiple platforms, saving my team many hours of manual testing with each release.	

Presentations	Texas A&M Undergraduate Research Scholars Symposium	<i>March 2019</i>
	Predicting ICU Readmission with Clinical Notes (Oral Presentation)	
	Texas A&M Engineering Project Showcase	<i>April 2017</i>
	Predicting User Characteristics from their Social Media Activity (Poster Presentation)	
Graduate Coursework	Artificial Intelligence, Machine Learning, Deep Learning	
Technical Skills	Python, C++, SQL, Matlab, Pytorch, Tensorflow, Git	
Service	Reviewer	
	• ACM Conference on Health, Inference, and Learning (CHIL), 2020	
	• NeurIPS Machine Learning for Health (ML4H) Workshop, 2019	
	• PLOS One	
Honors and Awards	Computing Research Association's 2020 Outstanding Undergraduate Researcher Award (Honorable Mention)	
	Outstanding Undergraduate Honors Thesis Award	
	Machine Learning For Health (ML4H) Workshop at NeurIPS 2019 Travel Grant Award	
	Craig and Galen Brown Foundation Scholar	
Extracurriculars	Junior Advisor For University Honors	<i>November 2017-May 2019</i>
	• Select and lead the following years team of sophomore advisors.	
	• Organize and carry out a number of events to foster community within the honors dorms.	
	Sophomore Advisor For University Honors	<i>January 2017-May 2018</i>
	• Teach the honors seminar required for all freshman in university honors.	
	• Facilitate a variety of discussions between freshman honors students in a small group setting.	
	Student Representative For Honors and Undergraduate Research Advisory Committee	<i>August 2018-May 2019</i>
	• Sat as the student representative on the committee responsible for the various honors and undergraduate research programs.	
	Texas A&M Powerlifting Team	<i>August 2016-May 2020</i>
	All-American Powerlifter	
	• Placed 2 nd in the nation in 2019.	
	• Placed 4 th in the nation in 2018.	