

## Justin Lovelace

(512)964-9498

jlovelac@andrew.cmu.edu

<b>Education</b>	<b>Carnegie Mellon University</b> M.S. in Language Technologies <i>August 2020-August 2022</i>
	<b>Texas A&amp;M University</b> B.S. in Computer Science, Minor in Mathematics Honors Fellow, Engineering Honors, Undergraduate Research Scholar <i>May 2020</i> GPA: 4.0
	<b>Undergraduate Honors Thesis</b> Predicting ICU Readmission with Clinical Notes ( <b>Outstanding Undergraduate Honors Thesis Award</b> )
<b>Publications</b>	<b>J. Lovelace</b> , 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.
	<b>J. Lovelace</b> , 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. ( <b>Oral Spotlight</b> )
	<b>J. Lovelace</b> , N. Hurley, A. Haimovich, B. Mortazavi, "Explainable Prediction of Adverse Outcomes Using Clinical Notes" <i>NeurIPS Machine Learning for Health Workshop</i> , 2019.
<b>Research Experience</b>	<b>Systems and Technology for Medicine and IoT Lab</b> <i>April 2018-May 2020</i> Undergraduate Researcher with Dr. Bobak Mortazavi (TAMU) <ul style="list-style-type: none"><li>Developed convolutional attention models for the interpretable prediction of ICU readmission and patient mortality using clinical notes.</li></ul>
	<b>Sketch Recognition Lab</b> <i>January 2017-May 2017</i> Undergraduate Researcher with Dr. Tracy Hammond (TAMU) <ul style="list-style-type: none"><li>Developed a machine learning model to predict users' personality traits based on their social media activity.</li></ul>
	<b>Facebook (Search)</b> <i>May 2020-August 2020</i> Software Engineering Intern <ul style="list-style-type: none"><li>Developed a framework to onboard keywords to the search index in real time from a variety of sources (e.g. news articles).</li></ul>
<b>Industry Experience</b>	<b>Facebook (Notification Ranking)</b> <i>May 2019-August 2019</i> Software Engineering Intern <ul style="list-style-type: none"><li>Implemented rate limiting service to protect Facebook's internal reachability service and its dependencies from unstable traffic.</li><li>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.</li></ul>
	<b>Raytheon Applied Signal Technology</b> <i>May 2018-August 2018</i> Software Engineering Intern <ul style="list-style-type: none"><li>Developed python scripts to automate testing procedures across multiple platforms, saving my team many hours of manual testing with each release.</li></ul>
	<b>Texas A&amp;M Undergraduate Research Scholars Symposium</b> <i>March 2019</i> Predicting ICU Readmission with Clinical Notes (Oral Presentation)
<b>Presentations</b>	<b>Texas A&amp;M Engineering Project Showcase</b> <i>April 2017</i>

Predicting User Characteristics from their Social Media Activity (Poster Presentation)

<b>Graduate Coursework</b>	<b>Artificial Intelligence, Machine Learning, Deep Learning</b>
<b>Technical Skills</b>	<b>Python, C++, SQL, Matlab, Pytorch, Tensorflow, Git</b>
<b>Service</b>	<b>Reviewer</b> <ul style="list-style-type: none"><li>• ACM Conference on Health, Inference, and Learning (CHIL), 2020</li><li>• NeurIPS Machine Learning for Health (ML4H) Workshop, 2019</li><li>• PLOS One</li></ul>
<b>Honors and Awards</b>	<b>Computing Research Association's 2020 Outstanding Undergraduate Researcher Award (Honorable Mention)</b>  <b>Outstanding Undergraduate Honors Thesis Award</b>  <b>Machine Learning For Health (ML4H) Workshop at NeurIPS 2019 Travel Grant Award</b>  <b>Craig and Galen Brown Foundation Scholar</b>
<b>Extracurriculars</b>	<b>Junior Advisor For University Honors</b> <i>November 2017-May 2019</i> <ul style="list-style-type: none"><li>• Select and lead the following years team of sophomore advisors.</li><li>• Organize and carry out a number of events to foster community within the honors dorms.</li></ul> <b>Sophomore Advisor For University Honors</b> <i>January 2017-May 2018</i> <ul style="list-style-type: none"><li>• Teach the honors seminar required for all freshman in university honors.</li><li>• Facilitate a variety of discussions between freshman honors students in a small group setting.</li></ul> <b>Student Representative For Honors and Undergraduate Research Advisory Committee</b> <i>August 2018-May 2019</i> <ul style="list-style-type: none"><li>• Sat as the student representative on the committee responsible for the various honors and undergraduate research programs.</li></ul> <b>Texas A&amp;M Powerlifting Team</b> <i>August 2016-May 2020</i> All-American Powerlifter <ul style="list-style-type: none"><li>• Placed 2<sup>nd</sup> in the nation in 2019.</li><li>• Placed 4<sup>th</sup> in the nation in 2018.</li></ul>