

Eliana “Eli” Feasley

e.feasley@gmail.com
cs.utexas.edu/~elie

(917)-647-8930
2828 B San Gabriel, Austin, TX

Research Statement

I'm a PhD student at UT Austin fascinated by and passionate about intelligent tutoring systems and massive open online education. In particular I want to match students with content based on aptitudes and preexisting understanding to target education to maximize student knowledge and engagement.

As educational data becomes massive and MOOCs are disrupting traditional institutions, it's time to find out new things about how people learn and replace frustrating, redundant and expensive experiences with those that are optimized, accessible and free. I want to formulate questions about education as well-defined machine learning challenges, and use AI techniques to empirically evaluate pedagogy and cognitive-science-based hypotheses about learning and education.

I see this challenge as having two parts - first, being able to accurately identify trends and patterns in learning, and second, using evidence-based design and A/B testing to create more powerful learning experiences. I want to collaborate with course providers to generate and evaluate hypotheses about how students worldwide learn, so everyone can have an excellent education.

Education

2011–Present	Pursuing PhD in Computer Science, University of Texas at Austin GPA 3.85 Graduate Coursework: <i>Graphical Models, Numerical Linear Algebra,</i> <i>Artificial Intelligence, Natural Language Processing,</i> <i>Sensation and Perception, and Mathematical Logic</i>
2009–2011	BS in Computer Science, University of Maryland, Baltimore County GPA 3.94

Publications

- | | |
|------|--|
| 2012 | W. Tansey, E. Feasley, and R. Miikkulainen. Accelerating evolution via egalitarian social learning. In <i>Proceedings of the fourteenth international conference on Genetic and evolutionary computation conference</i> , pages 919–926. ACM, 2012 |
| 2012 | R. Miikkulainen, E. Feasley, L. Johnson, I. Karpov, P. Rajagopalan, A. Rawal, and W. Tansey. Multiagent learning through neuroevolution. <i>Advances in Computational Intelligence</i> , pages 24–46, 2012 |
| 2011 | M. desJardins, A. Ciavolino, R. Deloatch, E. Feasley, et al. Playing to program: Towards an intelligent programming tutor for rur-ple. In <i>Second AAAI Symposium on Educational Advances in Artificial Intelligence</i> , 2011 |

Work Experience

Currently	Research Assistant, UT Austin In the Neural Networks group led by Risto Miikkulainen Researching communication between agents in multiagent systems in collaboration with biologists studying hyenas in the wild. Co-wrote grant that earned funding from the NSF's BEACON Center for the Study of Evolution in Action.
2011	Teaching Assistant, Computer Science Department, UMBC Participated in developing course materials for hundreds of students, led multiple lab sections with hands-on coding.
2011	Research Assistant, UMBC In the Multi-Agent Planning and Learning Lab led by Marie desJardins Developed cognitive models of student understanding, designed and ran human subjects experiments, collaborated in developing a dynamic Python tutoring environment.
2010-2011	Computer Science Tutor, Computer Science Department, UMBC Guided students with severe challenges through computer science courses, designed simple tactile learning experiences.
2009	Community Organizer, Unite HERE! Volunteered to organize hotel workers for higher wages and safer working conditions. Supported low income workers in developing a Human Rights Zone in Baltimore's Inner Harbor

Skills

Python, Rails, bash, MATLAB, Java, HTML, CSS, and Javascript
Scraping the web. Clear writing. Operating any *nix system.
Building systems to collect, clean, and analyze data

Leadership and Miscellanea

Organizer, Forum for Artificial Intelligence at UT
Founding member of Broader Impact Group in Artificial Intelligence
Graduate Representative for Computer Science
Best Undergraduate Research Award, UMBC
Hiked from Georgia to Virginia, and lived outside for over six months
Other projects are located on my website: cs.utexas.edu/~elie